United States Department of the Interior

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IN REPLY REFER TO:
4100

Kimble Wilkinson Ranches
C/o Kimble Wilkinson
P.O. Box 476
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NOTICE OF THE FIELD MANAGER'S FINAL DECISION

Dear Mr. Wilkinson:

INTRODUCTION

Subsequent to the approval of revised BLM grazing regulations in 1995, BLM State Directors were assigned the task of developing state level rangeland health standards (Title 43 Code of Federal Regulations [CFR] 4180.2). The process of developing standards and defining standard indicators was conducted in consultation with BLM Resource Advisory Councils (RAC's). The purpose for setting standards and identifying their indicators was to provide BLM with a rational basis for determining whether current management is meeting the Fundamentals of Rangeland Health as described under 43 CFR 4180.1.

On August 12, 1997, Interior Secretary Bruce Babbitt approved the Oregon/Washington BLM Standards and Guides (S&G's) for Rangeland Health. BLM field offices in Oregon/Washington were subsequently directed to conduct assessments and then use that assessment information to craft range health evaluations in relation to the state standards. These evaluations are conducted under an interdisciplinary team (IDT) concept where various resource specialists, representing the biological and physical sciences, are involved in the collection, review and analysis of available data.

In order to accomplish this assessment and evaluation workload and conform to the need for completing work on a watershed basis, Jordan Resource Area was divided into eight land based administrative units now referred to as Geographic Management Areas (GMA's). Based on multiple resource values and ongoing management issues needing resolution, the Louse Canyon GMA (LCGMA) was selected to be the first GMA to be assessed in Jordan Resource Area.

BLM regulations specify that "the authorized officer shall take appropriate action as soon as practicable but not later than the start of the next grazing year upon determining, through assessment or monitoring by experienced professionals and interdisciplinary teams, that a standard is not being achieved and that livestock are a significant contributing factor to the failure to achieve the standards and conform with the guidelines".

This final decision is the next step following the proposed decision that was issued February 28,

2005 and is the final step in the GMA process, where changes to existing grazing management practices will be implemented. Issuing this decision will allow for significant progress to be made toward meeting Standards for Rangeland Health in LCGMA, and is issued in compliance with the Southeastern Oregon Resource Management Plan (SEORMP) and Record of Decision of September 2002.

BACKGROUND

You received my Notice of Proposed Decision, dated February 28, 2005, regarding the issuance of a new term grazing permit that would authorize you to graze livestock on the Louse Canyon Community Allotment. This new permit is based upon discoveries that were revealed with the completion of the Louse Canyon Geographic Management Area Standards of Rangeland Health Evaluation and Revised EA, which stated that riparian conditions in areas you graze livestock are not meeting the Oregon/Washington Standards for Rangeland Health as a result of existing grazing management practices.

Timely protests to the Proposed Decision were received from Peter M. Lacy of Oregon Natural Desert Association (ONDA) and Katie Fite of Western Watersheds Project (WWP). I have carefully considered each protest's statement of reasons as to why the proposed decision was in error and have responded to these reasons below. There were four separate protests to the proposed decision submitted by ONDA and WWP. BLM has labeled each protest letter as A, B, C or D in order to differentiate between the documents.

PROTEST DOCUMENT "A"

Reason **[A1]** WWP states ***"****here is an Area of Critical Environmental Concern Nomination to be incorporated into the comments and Protest of ONDA and WWP on the Louse Canyon GMA process. We PROTEST your failure to manage these lands, as shown by the actions put forth in the Proposed Decisions and EA, for the very significant values they contain, as described in the ACEC proposal below."*

> Response to **[A1]**: WWP and ONDA's proposal to create a Sagebrush Biome ACEC necessarily involves land allocation actions which are done within a resource management plan, or a resource management plan amendment. Those planning processes are funded on an infrequent, periodic basis by Congress and the recently completed SEORMP made ACEC allocations within the planning area that includes Louse Canyon. BLM, on its own initiative, proposed a number of ACEC's and contracted with a highly credible resource, The Nature Conservancy, to identify additional areas where ACEC's might be necessary to protect important and relevant values, including representative habitats. Ultimately, 206,257 acres of ACEC's were designated in the SEORMP.
>
> ONDA was intimately involved in the SEORMP process which concluded in 2002, to the point of protesting and litigating the result. Yet never once in the SEORMP scoping process, in the comments to the DEIS, in ONDA's protest of the Record of Decision, nor in the lawsuit did ONDA mention or suggest a Sagebrush Biome ACEC for the Louse Canyon area. The suggestion that such an ACEC is now critically necessary after the appropriate venue was ignored appears to be disingenuous. The ACEC analysis provided is largely a regurgitation of the protest comments submitted, many of which were clipped without editing and reused from protests and EIS comments filed by WWP or its precursors in Idaho or other states, with questionable

relevancy to Louse Canyon. The ACEC analysis relies heavily on documents produced by the protestants or their organizations without peer review. The protestant describes the riparian areas as meeting criteria for ACEC designation when it suits the organization's purpose (see second to last paragraph of this proposal) and describes them as "a brine of feces, urine and mud" when that description suits their purpose. The map submitted consists of a general location map of SE Oregon with a penciled circle around the Louse Canyon area. All these circumstances provide evidence of a lack of credence and suggest the submittal is an afterthought for how to further delay the decision process rather than a serious ACEC proposal.

In any case, evaluating and creating an ACEC is a separate decision that is unrelated to the decisions being protested except to the extent that those decisions may place relevant and important values at risk and require temporary management (BLM Manual 1613—Areas of Critical Environmental Concern, Section 2 [E]). Grazing has been a part of the biome for over 100 years in the Louse Canyon area and the proposed grazing decisions implement practices and projects that will, over time, protect and restore the riparian zones identified as being at risk in the LCGMA Evaluation. Besides protecting riparian areas, the proposed decisions are not moving grazing into lands that haven't been previously grazed and are not proposing activities that will deplete aquifers (substantial well or new spring developments). If past land management has preserved the values important to ONDA sufficient for them to nominate an ACEC, then extension of that management under the proposed decisions will maintain and enhance those values until the proposal can be evaluated in the next appropriate resource management planning process for this area. BLM finds there is insufficient substantial, credible evidence presented in the protest comments or in the ACEC proposal to presume that the alleged ACEC values are at risk and finds no need for temporary management to protect the alleged values until the next planning process.

In making the finding that no temporary management is required, no additional consideration of the ACEC proposal will be made at this time. Protest comments relative to the ACEC proposal are deemed outside of the scope of the proposed decisions and will not be addressed further, except to the extent that the comments are redundant in the protest letters and are answered there.

PROTEST DOCUMENT "B"

Pursuant to 43 C.F.R. § 4160.3(a), the Oregon Natural Desert Association (ONDA) and Western Watersheds Project (WWP) hereby protest the proposed decisions, dated February 28, 2005 and addressed to Thomas Harry, Owyhee Grazing Association, For McDermitt Stockman's Association, Nouque Ranch, and Kimble Wilkinson Ranches, stemming from the BLM's Louse Canyon Geographic Management Area Revised Environmental Assessment (EA # OR-030-04-013). Under 43 C.F.R. § 4160.3(a), an interested public has 15 days after receipt of a proposed decision to protest that decision with the authorized officer. ONDA received the above-referenced Notices of Proposed Decision on March 2, 2005. As stated in ONDA's comment letter on the original EA last fall, ONDA is a non-profit public interest organization dedicated to preserving and protecting the public lands of eastern Oregon. ONDA's mission is to protect, defend, and restore forever, the health of Oregon's native deserts. The members and staff of ONDA use and enjoy the public lands, waters, and natural resources of the public lands within and surrounding the LCGMA for countless recreational, scientific spiritual, educational, aesthetic, and other purposes. Please consider this protest in conjunction with that submitted by Katie Fite, also on behalf of both ONDA and WWP. ONDA hereby incorporates by reference the

statement of reasons supplied in that protest and will accordingly limit the points in this letter to supplemental points not raised in that protest.

In October 2004, ONDA and WWP indicated that there were several significant shortcomings in the EA that the BLM should remedy before issuing a final decision. Our concerns with the EA and the preferred alternative included the effects of the proposed grazing on sage grouse and their habitat, the BLM's refusal to conduct an analysis of the suitability of continued levels of grazing in these areas, the document's failure to incorporate and discuss important scientific studies in the analysis, the document's failure to address monitoring, and concerns over mitigation and funding of the preferred alternative. Some parts of these issues have been addressed by the BLM. Many have not. In addition, the BLM continues to decline to address the impacts of the proposed decisions on the wilderness resource and refuses to consider the wilderness inventory report and recommendations submitted by ONDA in February 2004. For the reasons that follow, ONDA and WWP (hereafter collectively referred to as "ONDA") protest the proposed decisions and ask the BLM to withdraw those proposed decisions and prepare an EIS that adequately addresses these issues and complies with all relevant statutory and regulatory requirements.

I. The BLM Must Prepare an EIS

As you know, the agency must prepare an EIS for all major federal actions that "may significantly affect the quality of the human environment." 42 U.S.C. § 4332(2)(C). The BLM may first prepare an EA to determine whether the action may have significant environmental effects. 40 C.F.R. §§ 1501.4, 1508.9. Reason **[B1]** *The factors used to determine significance are "context" and "intensity" and include consideration of the uniqueness of the geographic area, public controversy, and the uncertainty of the project's possible effects. 40 C.F.R. § 1508.27. Because the EA and proposed decisions cover well over a half million acres, could take up to a decade or more to implement, include broad-scale rangeland projects, involve grazing management decisions for areas determined to be in violation of applicable rangeland health standards, and would take place within both designated WSAs and non-WSA roadless areas with inventoried wilderness values, this project requires an EIS rather than an EA.*

> Response to **[B1]**: The factors used to determine significance, including those mentioned in the protest comment, and a summary justification for the conclusion on non-significance are included in each of the proposed decisions. These summary justifications for non-significance are supported by the analysis in the EA pertaining to specific projects, actions, or grazing systems in the proposed decisions. The Louse Canyon GMA EA is tiered to and incorporates by reference (40 C.F.R. § 1502.20 and 1502.21) the Southeastern Oregon Resource Management Plan (SEORMP)/EIS, which entirely encompasses the area of the LCGMA. In addition, the RMP/EIS fully discloses and discusses impacts that may or may not be significant, including the effects of projects like pipelines, fences, and of grazing system changes in a broad landscape context over a relatively long period of time. Since the LCGMA EA does not include any specific projects or grazing systems that fall beyond the scope of those already discussed in the SEORMP EIS or that, after applying mitigation, would significantly affect the quality of the human environment, BLM reached the conclusion that no EIS is necessary and issued a Finding of No Significant Impact (FONSI) for each of the proposed grazing permit renewals. Since the purpose of an EIS is to disclose to the public and to decision makers the potential impacts of proposed actions, and since these disclosures are already made through the SEORMP EIS and the LCGMA EA, an EIS would

add no new information and would serve no purpose except to delay implementation of grazing decisions issued under the Standards for Rangeland Health. ONDA filed a lawsuit (Case No.04-CV-334-KI) specifically to require BLM to speed up its consideration of grazing under the Standards for Rangeland Health, so a redundant EIS will not serve ONDA's interests either.

BLM asserts that the only truly unique aspects of the LCGMA (in the sense that landscape and habitats are not replicated in abundance both within and outside the Vale District) are primarily contained within the West Little Owyhee Wild and Scenic River corridor. Since these lands are already under WSR protection and management and are not affected by the proposed grazing decisions (authorized grazing is excluded), there are no significant impacts accruing to unique geographical areas. Further, mere disagreement is not, in itself, a measure of controversy. If BLM were to propose some unusual, untested, and obscure grazing system or rangeland improvements in its proposed decisions, such that all publics were questioning our proposals and methods, then that would be highly controversial. That is not the case here, but it is the kind of situation contemplated by the CEQ rules. BLM and ONDA have a basic disagreement over how public lands are allocated, used, and managed. That is a fact, but it is not in and of itself controversial. Since BLM's proposed grazing decisions incorporate methods that have been used for decades with success (exclosure fencing of riparian areas, providing water outside of riparian zones, reduction in hot season grazing, changing or shortening season of use, etc.) coupled with experience with similar grazing methods in riparian pastures the nearby Oregon Canyon (Trout Creek) Mountains and a commitment to monitoring and adaptive management, there is little uncertainty regarding the effects of the proposed decisions.

Reason **[B2]** *ONDA previously cited law and regulations indicating that a lengthy EA such as this usually indicates an EIS is needed. As the Ninth Circuit has observed, "[n]o matter how thorough, an EA can never substitute for preparation of an EIS, if the proposed action could significantly affect the environment."Anderson v. Evans, 314 F.3d 1006 (9th Cir. 2002).*

Response to **[B2]**: Ultimately, the size of the document reflects the level and thoroughness of analysis, the nature and volume of comments, and the determination by the BLM to thoroughly address relevant comments and to fully disclose past, present, and future monitoring plans and commitments to mitigation. None of these things necessarily relate to the context and intensity of impacts that determine significance, which is the legal yardstick by which the (FONSI) was determined. BLM believes that careful consideration of the facts and record presented in the proposed decisions, LCGMA EA, LCGMA Evaluation, the administrative record for Case No.04-CV-334-KI, and the related documents that the LCGMA EA tiers to and incorporates by reference (SEORMP/EIS and Record of Decision, and the administrative record for ONDA's parallel lawsuit on those documents--Case No. 03-CV-1017-JE) supports BLM's approach.

Yet the BLM failed to respond to this issue in the Revised EA. The proposed decisions' FONSI claims the types of impacts expected from implementation of the preferred alternative "were anticipated and declared" in the SEORMP EIS and ROD in September 2002. Proposed Decision at 3. Reason **[B3]** *The BLM then concludes without support, "To the extent there are impacts beyond those described in the SEORMP/EIS, they are not significant." Id.*

Response to **[B3]**: See response to **[B1]** and **[B2].**

Reason **[B4]** *Moreover, the BLM may not rely upon its brief description of mitigation measures to avoid "significance" under NEPA.*

Response to **[B4]**: BLM is entitled to rely on such mitigation as is necessary to ensure that environmental effects are below the level of "significance". If that list is "brief", as contended by ONDA, then that is simply further evidence that the environmental effects of the proposed decisions are generally benign, beneficial, and lacking any mitigation requirement.

See, e.g., Idaho Sporting Cong. v. Thomas, 137 F.3d 1146, 1151 (9th Cir. 1998) (court rejected "mere listing" of mitigation measures in EA where analytical data was lacking); Neighbors of Cuddy Mtn. v. U.S. Forest Serv., 137 F.3d 1372, 1380 (9th Cir. 1988) ("Forest Service's perfunctory description of mitigating measures" did not provide "sufficient detail to ensure that environmental consequences have been fairly evaluated"); Nat'l Parks & Cons. Ass'n v. Babbitt, 241 F.3d 722, 735 (9th Cir. 2001) ("speculative and conclusory statements were insufficient to demonstrate that the mitigation measures would render the environmental impacts so minor as to not warrant an EIS").

In the BLM's discussion of "context" and "intensity" the agency concludes that the physical effects of the project would be "miniscule" and that "none of the actions contemplated are irreversible." Proposed Decision at 4. Reason **[B5]** *In the proposed decisions and the EA, the BLM frequently tries to downplay the significant of increasing the miles of fence in the LCGMA by over 20%, by stating that fences can always be taken down. See id. at 5, 6. This is an overly simplistic argument, as there can be little argument that, among other things, fences create new livestock trailing corridors, new areas subject to weed infestations and new visual intrusions on the landscape, and in turn damage the potential for non-WSA roadless areas with wilderness values to be potentially designated as wilderness. There are similar long-term, irreversible commitments involved with the extensive water development projects at issue in this EA.*

Response to **[B5]**: BLM identified impacts from fences, including those mentioned by ONDA in both the EA and in the SEORMP/EIS, which the EA tiers to and incorporates by reference. BLM believes the record adequately supports the proposed decision and demonstrates that, in an environmental assessment tiered to an environmental impact statement, BLM took a hard look at the potential environmental impacts of its decision and properly concluded that no significant impact not previously considered would likely result, thus complying with section 102(2) of the National Environmental Policy Act, 42 U.S.C. § 4332(2) (2000). See IBLA 2003-36. Further, a party challenging BLM's decision to proceed with construction of a fence to protect public rangeland (in this case to protect and enhance riparian areas and pastures that are not meeting Standards for Rangeland Health) and a finding of no significant impact has the burden of demonstrating with objective proof that the decision is premised on a clear error of law or demonstrable error of fact, or that the analysis failed to consider a substantial environmental question of material significance to the proposed action. Mere differences of opinion provide no basis for reversal where the decision is reasonable and supported by the record. See IBLA 2003-21. ONDA has adequately demonstrated a difference of opinion, but has not met the burden of providing "objective proof" in support of its protest.

BLM has consistently tried to place potential impacts in context with the 521,541 acre GMA. The Louse Canyon GMA generally has one of the lowest densities of fencing on the district at about .34 mile of fence per square mile. The proposed fencing projects necessary to protect riparian areas will increase this to .41 miles per square mile, which is still less than almost every GMA on the Vale District. In the context of a GMA with over a half million acres, the proposed fencing is miniscule and will have the beneficial effect of protecting resources that ONDA admits are important. In Civ. No. CV 98-97 RE, a lawsuit initiated by ONDA, the

District Court of Oregon ordered the placement of up to 25 miles of new fence (as well as 23.3 miles of pipeline and 10 watering troughs) in and adjacent to Wilderness Study Areas and Wild and Scenic River corridors. BLM made representation to the court at that time . . ."If any wilderness study area, affected by a new fence, is ever designated as a wilderness by congressional action, any new fence would be reevaluated and the final disposition of the fence (whether it stays or goes) would be determined in the language of the designating Act"; Fifth Declaration of Jerry Taylor at 3. BLM believes the court's decision in that instance to order projects similar in purpose and magnitude to those contemplated in the Louse Canyon GMA grazing decisions reinforces BLM's contention that the LCGMA rangeland improvement projects that will be implemented with the present decisions are below the level of significance (40 C.F.R. § 1508.27) and are neither irreversible nor irretrievable with respect to potential wilderness designation, if designation was warranted at some future date.

Reason [B6]*While the BLM discusses whether the impacts of the new grazing systems would be considered "highly controversial" to permittees, the agency remains silent on whether altering the landscape without considering impacts on wilderness values would be controversial to other segments of society. Id. at 5.*

Response to **[6]**: See response to **[B1]** and **[B5]**.

In short, the BLM has not shown that the proposed action will not have significant impacts on the human environment. As such, the BLM must prepare an EIS for this project.

II. Potential Effects to the Wilderness Resource

Throughout the course of this and other Vale BLM planning processes, ONDA has expressed its concern that the BLM's proposed actions may impact wilderness values and the wilderness resource on the public lands. Reason **[B7]** *ONDA has asked the BLM to consider the impacts of its proposals on non-recommended wilderness study areas as well as non-WSA roadless areas that may possess significant wilderness characteristics. Yet the BLM remains virtually silent on the issue aside from citing the agency's obligation to manage wilderness study areas ("WSAs") in a manner so as not to degrade the suitability of those lands for preservation as wilderness. Revised EA at 197.*

Response to **[B7]**: "Non-recommended" WSA's have always been subject to BLM's Handbook H-8550-1, Interim Management Policy and Guidelines for Lands Under Wilderness Review (IMP). Thus, BLM has not been silent on the matter of managing "non-recommended WSA's" in a manner so as not to degrade the suitability of those lands for preservation as wilderness while waiting for Congress to decide on the wilderness designation issue (for BLM's wilderness recommendations, refer to BLM Oregon State Office's Wilderness Study Report (October 1991).

As you know, the BLM is under a continuing duty to manage the public lands for multiple use and to prevent unnecessary or undue degradation to the public lands and their resources. 43 U.S.C. § 1732(a). Among the multiple use values the BLM must manage for is the wilderness resource. FLPMA also requires the BLM to "prepare and maintain on a continuing basis an inventory of all public lands and their resource and other values (including, but not limited to, outdoor recreation and scenic values)." Id. § 1711(a). The "inventory shall be kept

current so as to reflect changes in condition and to identify new and emerging resource and other values." Id.

In 2001, ONDA wrote to the Jordan Resource Area Field Manager, asking why the BLM would not conduct any wilderness inventory as part of the SEORMP planning process and requesting that the BLM, if it would not do so as part of the SEORMP, undertake a wilderness resource inventory as part of the LCGMA process. Reason **[B8]** *The BLM responded that "[a] re-inventory of wilderness values is well beyond the scope of the GMA assessment and evaluation process." Letter from Jerry Taylor to Gillian Lyons (Nov. 30, 2001).*

> Response to **[B8]:** BLM's response letter further states, "(t)he Louse Canyon GMA assessment of rangeland health and evaluation of management effectiveness, which is currently underway, is not a 'land use planning' process. It is an activity level review of rangeland health and management effectiveness which ties into our implementation of the 43CFR 4180 grazing regulations, relative to Standards for Rangeland Health. Also, BLM's Draft Southeast Oregon Resource Management Plan Enviromnental Impact Statement, volume 1, page 1-10 (October, 1993), Proposed Southeastern Oregon Resource Management Plan and Final Environmental Impact Statement, volume 1, page12 (April 2001), and Southeastern Oregon Resource Management Plan and Record of Decision, page 7 (September, 2002) states, "Issues related to potential changes in Federal Law, e.g., laws relating to energy and mineral development, grazing, and wilderness designation or release of WSA's , are outside the scope of the plan because they hinge on congressional actions." Finally, in compliance with the settlement of Utah vs. Norton, after April 14, 2003 it is no longer BLM policy to continue to designate new WSAs through the land use planning process, or manage any lands -- except WSAs established under Section 603 of the FLPMA and other existing WSAs -- in accordance with the non-impairment standard prescribed in the IMP.
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> BLM's wilderness review process started in 1978, the Final EIS was completed in 1989, with the Record of Decision and recommendation for the Secretary of Interior submitted in October 1991 (Wilderness Study Report). BLM's recommendations were submitted to Congress by the President in 1992. Congress has yet to take action on the President's recommendations, which were the same as BLM's, and BLM is not authorized to change the recommendations in the interim.

If a wilderness inventory is "well beyond the scope of" the GMA process, then the only remaining broad-scale land use planning process remaining under which the BLM might fulfill its wilderness inventory duties, is the RMP process. Reason **[B9]** *Nevertheless, the BLM argued that it need not "reopen[] the wilderness issue in the SEORMP" because "the legal standards haven't changed; and there is no new, compelling information, which suggests our original inventory, interpretations or recommendations are inappropriate." Id. The BLM argues that it has "no reasonable foundation to re-inventory or re-address the issue of Wilderness in the SEORMP," see id.—which is clearly in contravention to FLPMA's mandate to conduct an ongoing inventory of the public lands and their resources and values.*

> Response to **[B9]:** BLM further stated, in its July 30, 2004, response letter to ONDA (regarding a February 6, 2004, ONDA submission of wilderness inventory recommendations and requests to amend the SEORMP to designate 42 new WSA's), that "(t)he information presented by ONDA does not appear to amount to substantially new information or circumstances" to support designation of new WSA's. Also refer to response to **[B8].**

Reason **[B10]** *Because the BLM failed to undertake or perform these duties during the SEORMP process, it must now insure that it fulfills these obligations during subsequent site-specific projects where wilderness resources may be impacted. The present project is one such instance.*

Response to **[B10]:** There has been no BLM Vale District failure, noting the district was (and still remains) not in a position to change wilderness recommendations -- based on prior district-wide wilderness inventory data, assessment of the data, and resultant wilderness recommendations -- which were pending action by Congress during development of the SEORMP. Further, when put into affect on January 10, 2001, agency direction (BLM Washington D.C. Information Bulletin (IM) No. 2001-043) for applying BLM's new Handbook H-6310-1, Final Wilderness Inventory and Study Procedures stated that "(t)he attached Handbook contains the Bureau of Land Management's (BLM) policy, direction, general procedures and guidance for all future wilderness inventories and future designations of Wilderness Study Areas under provisions of Sections 201 and 202 of the Federal Land Policy and Management Act of 1976. This guidance applies only to new inventory and land use planning efforts." The SEORMP was not a new land use planning effort at that time, given it was already in progress, thus not subject to the H-6310-1. The IM and handbook have since been rescinded (June 20, 2003), in accordance with the settlement of Utah vs. Norton, so BLM's ability to conduct new wilderness inventories so as to designate additional WSA's is moot.

Reason **[B11]** *Thus, the BLM must consider in this NEPA process any potential impacts to wilderness values of its proposed action and alternatives.*

Response to **[B11]:** See Response to **[B9].**

Both NEPA and FLPMA impose on the agency affirmative duties to carefully present, incorporate and consider this new information.

On February 6, 2004, ONDA submitted to the BLM its Vale District Wilderness Inventory Report and Recommendations. Reason **[B12]** *ONDA's wilderness inventory and report demonstrates in great detail just how wrong the BLM is in its assertion that there is "no new, compelling information" to suggest a wilderness inventory would have been appropriate during the RMP or GMA planning processes***.**

Response to **[B12]:** ONDA's proposed WSA units within LCGMA are within identified inventory units which were evaluated and documented for wilderness characteristics during BLM's wilderness review program, beginning in 1978. None of the inventory units met the minimum criteria for possessing wilderness characteristics, thus were not administratively designated as WSA's by BLM. An initial review of the inventory indicates that information presented by ONDA does not appear to amount to substantially new information or circumstances. Also see Response to **[B9]**.

Reason **[B13]** *In one summer, ONDA produced the type of detailed inventory information and data the BLM should have produced at some point during the seven-plus years the agency took to prepare the SEORMP.*

Response to **[B13]:** ONDA's February 6, 2004, letter states that their inventory was conducted "over the past year."

Reason **[B14]** *ONDA conducted its inventory in accordance with the BLM's own "Wilderness Inventory and Study Procedures" handbook, which directs public requests to consider certain lands with wilderness characteristics to be accompanied by maps showing specific boundaries of the areas in question, detailed narratives describing the area's wilderness characteristics and documenting how the newly presented information significantly differs from the information available in prior inventories conducted by the BLM, and photographic documentation.*[1]

Response to **[B14]:** Note that BLM's Handbook H- 6310-1 was rescinded (June 20, 2003) during the period of ONDA's inventory work, thus, making it no longer available to BLM as management direction for a wilderness inventory.

Reason **[B15]** *The nearly 400-page report includes for each of forty-two proposed WSAs, proposed WSA additions or wilderness ACECs recommended by ONDA maps identifying the boundaries of each area in question, annotated road and photo logs with GPS locations cued to the maps, and narratives analyzing each inventory unit under the BLM's definition of wilderness characteristics and documenting how that information is new and/or differs from the information in prior inventories conducted by the BLM regarding wilderness values for the area.*

Response to **[B15]:** First of all, ONDA's use of the term "wilderness ACEC" is misguided. Relevant and important values for ACEC's do not coincide with the criteria for creating wilderness. Thus, BLM would not be creating "wilderness" ACEC's. While an ACEC might happen to have some wilderness characteristics, that alone does not justify creation of an ACEC. BLM's July 30, 2004 response letter to ONDA's February 6, 2004 letter states, "ONDA's wilderness ACEC proposal fails to make a case as to why the proposed wilderness ACECs require special management attention to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, other natural systems or processes, etc., as required under FLPMA. Furthermore, the scoping process for the SEORMP/EIS asked for input from the public specifically on ACECs. BLM received input from the public and from BLM staff during the SEORMP planning process. All ACEC recommendations were reviewed and screened for relevant and important values and the resulting recommendations were made public in the draft and final documents. ONDA made no ACEC proposals, nor did ONDA comment on ACEC proposals made by others during development of the SEORMP/EIS." Also see response to **[B12]**.

In total, ONDA inventoried over 2.2 million acres of public land within the SEORMP planning area. Reason **[B16]** *Of that amount, ONDA identified 1.3 million acres, either wholly or partially in the Vale District (and SEORMP planning area) as having wilderness qualities that*

[1] ONDA understands the BLM rescinded this handbook pursuant to a settlement agreement in the Tenth Circuit's District of Utah. See Utah v. Norton, Civ. No. 2:96:CV0870 B (D. Utah), Order Approving Stipulation and Granting Joint Motion to Dismiss Third Amended and Supplemented Complaint (filed Apr. 14, 2003). ONDA believes the settlement and the BLM's interpretations of its wilderness inventory duties under FLPMA, as envisioned in the settlement agreement, are unlawful. In any event, the Utah v. Norton settlement agreement currently is under litigation in the District of Utah, as is the BLM's assertion in other contexts that it need not revisit wilderness resource issues during RMP planning. Ore. Natural Desert Ass'n v. Bureau of Land Mgmt., Civ. No. 03-1017-JE (D. Or. filed July 29, 2003).

the BLM should affirmatively consider in its land management. Of these, the Willow Creek, Oregon Butte Addition, Black Butte Addition, Battle Mountain, Rattlesnake Canyon lie partially or wholly within the LCGMA and contain significant wilderness values.

> Response to **[B16]:** Per ONDA's February, 2004, report provided to Vale District, none of its Battle Mountain unit is within the GMA. ONDA's Mouse Trap Butte unit (not mentioned herein) is partially within the GMA. Also see response to **[B15]** addressing "wilderness ACEC's".

Reason **[B17]** *These values are worthy of protection under the BLM's multiple use management of the public lands, but at a minimum must be considered during this NEPA process to determine the proposed action's and alternatives' potential impacts on this resource.*

> Response to **[B17]:** Relative to ONDA's proposed WSA units, the SEORMP Record of Decision (ROD) does have OHV use designations in certain locations which limit motorized vehicle use to existing routes because of recognized resource values or user conflicts. The ROD also restricts new range projects (fences, reservoirs, etc.), restrains levels of grazing use within relatively pristine native ecosystems, protects wildlife habitat, and protects riparian areas. Such management prescriptions are not premised specifically on wilderness characteristics concepts, be they present or not. Nonetheless, wilderness characteristics such as naturalness and outstanding opportunities for solitude, if present, would be promoted by such management actions. In developing the SEORMP, BLM did not re-inventory public lands outside of existing WSA's for wilderness characteristics, noting that wilderness inventories of public lands by BLM had previously been conducted, and resultant WSA's were administratively designated. BLM's wilderness recommendations from that inventory/assessment process remain pending with Congress, and BLM is not authorized to change the recommendations in the interim.

Reason **[B18]** *A July 30, 2004 letter from BLM acknowledged that "[s]ince the BLM does have the authority to consider characteristics associated with the concept of wilderness during land use planning, [ONDA's wilderness inventory report] will be retained by BLM for reference in future land use planning efforts." Letter from Dave Henderson, Vale District Manager to Bill Marlett ONDA Executive Director (July 30, 2004). Nevertheless, it appears the BLM has completely ignored the ONDA wilderness inventory information in the LCGMA EA and proposed decisions. But ONDA's report and recommendations demonstrate that significant wilderness values are present within and adjacent to the planning area. This is new information and is also information the BLM should have collected during this planning process.*

> Response to **[B18]:** Future land use planning efforts specifically means RMP or RMP amendment and does not refer to the activity level plans like the GMA. BLM made no promise to include ONDA wilderness inventory in GMA evaluations, nor did BLM necessarily agree that ONDA's inventory information was correct. See also response to **[B9]**, **[B11]** and **[B12]**.

Reason **[B19]** *The area deserved to be protected as a wilderness study area, a wilderness ACEC, or some similar designation to recognize its outstanding wilderness values.*

> Response to **[B19]:** The entire GMA would not be an ONDA WSA unit. Rather, as indicated in ONDA's statements above, only portions of the GMA would include the five proposed ONDA

WSA units. Regarding wilderness ACEC's, refer to response to **[B15]**. Regarding certain management actions affecting ONDA's proposed WSA units, refer to response to **[B17].**

Reason **[B20]** *Most importantly for purposes of this proposal, though, is that the BLM present and analyze this new information in the context of its proposed action.*

Response to **[B20]:** Refer to responses to **[B17]** and **[B18].**

III. Potential Effects to Sage Grouse Populations and Habitat

ONDA previously expressed concern that the BLM's preferred alternative will have significant detrimental effects to sage grouse populations and habitat within the LCGMA. Our comments focused on habitat quality and fragmentation, and the likely significant adverse effects of the proposed grazing systems and levels of use and rangeland projects. Reason **[B21]** *In response, the BLM frequently asserts that it addressed ONDA's concerns in the SEORMP Record of Decision or FEIS. At the same time, though, the BLM admits that each GMA in the Vale District "can be expected to have a slightly different context for determining appropriate management because of historic impacts and other factors." Revised EA at 9 (citing SEORMP FEIS, App. F, p.289). As we have pointed out previously, the BLM's analysis of the impacts to sagebrush habitats from actions such as continued unsustainable levels of grazing and miles of new fences and pipelines is unsupported. To protect sage grouse, pygmy rabbits and other sagebrush-dependant species in the LCGMA, the BLM must consider the significant reduction or elimination of major causes of disturbance, such as livestock grazing. See especially Fite Protest at 11–23, 26–27, 30–33.*

Response to **[B21]**: The LCGMA "context" BLM used for the subject EA is one in which very limited impacts from roads, wildfire and so on are present and thus they help form the rationale for why permitting some additional impacts beyond current management is reasonable. BLM stated that the same actions taken in LCGMA would be inappropriate for Soldier Creek GMA because of the cumulative effects of high density fencing, seedings, and other factors. BLM has clearly considered the specific wildlife habitat setting in LCGMA and used those conditions to analyze impacts and formulate management as it said it would in the FEIS.

BLM did consider alternatives with significant livestock reductions in Alternatives IV, IVa, V, and VI. The wildlife impact narratives in the Revised EA describe the consequences that would be expected following reduced stocking rates and those under the Proposed Action. ONDA simply disagrees here with BLM that the Proposed Action mitigating measures and monitoring follow-up (coupled with the limited water availability for livestock) are valid explanations for why the agency will be able to substantially protect sage-grouse habitat values. Moreover, monitoring will show over time if the objectives are bring met (adaptive management). ONDA's definition of protection is one that means total elimination of adverse impacts.

ONDA also pointed out that the original EA failed to provide maps overlaying the locations of known sage grouse leks against the proposed grazing rotations, pipelines, watering troughs and other existing and proposed range developments. Reason **[B22]** *Although the BLM has now included lek locations on Map 2 (Alternative III), the agency does not explain why it still refuses to provide that information on the other maps associated with the project, including maps that*

show grazing rotations, and the locations of proposed pipelines, fences and other water developments.

Response to **[B22]**: BLM has provided the public with sufficient lek location information to analyze the situation and allow ONDA to draw conclusions about potential impacts to sage-grouse. It is not necessary to show lek locations on each and every map.

Reason **[B23]** *The BLM also does not respond to the comment that the EA fails to provide maps that overlap important information on special status species habitats and populations, topographic features, areas of exotic species or weed infestations, and areas of currently depleted vegetation. Again, there is no compelling reason not to provide this critical information on the maps accompanying this proposed action. This continued shortcoming violates NEPA's requirement to achieve full public disclosure and informed decision making. See Robertson v. Methow Valley Citizens, 490 U.S. 332, 349 (1989) (NEPA "guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decision making process and the implementation of that decision*.").

Response to **[B23]**: The question ONDA raises does not specify whether they are referring to special status plants, aquatic species, or terrestrial wildlife. There is no specific requirement to include maps of special status species populations in a rangeland health evaluation EA. But more importantly, no one including ONDA requested such maps until very late in this process or else the agency could have provided them. ONDA's inopportune requests and comments are indicative of their intent to obstruct and frustrate the process rather than cooperate to solve issues and work with BLM staff.

BLM described in Evaluation narratives how terrestrial animals of management importance are associated with different rangeland habitat types. BLM is focusing on managing habitat for a variety of species SEORMP/ FEIS, Vol. 1, page 67) and considers population or species distribution information from the state or other published data sources. Within the BLM's planning and analysis toolbox there is a practical limit to how much information can be included in an Evaluation and EA. ONDA's demands here are not practical considering the number of species present within the EA area.

The vegetation Map 4 in the Evaluation shows the distribution of low sagebrush and big sagebrush habitat types which dominate LCGMA, Map 6 shows the most current upland ecological condition classifications, and Maps 7 and 8 show springs and riparian areas found within the assessment area. Since sage-grouse are a particularly important species, lek locations were provided. These maps in combination are considered adequate for depicting the distribution of wildlife and their habitats within LCGMA on the basis of habitat relationships.

The publication entitled *The Relationship of Terrestrial Vertebrates to Plant Communities and Structural Conditions: Part 1 and Part 2 in Wildlife Habitats in Managed Rangelands —The Great Basin of Southeastern Oregon* (Thomas and Maser 1984) describes in narratives and tables of information how habitats of southeastern Oregon and wildlife are correlated with one another. Populations of wildlife generally coincide with the distribution of habitat types.

The reason why BLM does not have more detailed information is because it would entail acquisition of research-level information which is outside of the scope of this process. BLM has sufficient information upon which informed decisions can be made; additional research was not

necessary; particularly in light of requests like ONDA's to move expeditiously. Moreover, BLM pointed to information sources in the SEORMP FEIS in the Chapter 2 wildlife section and thus has indicated where wildlife distribution information is available to the "larger audience".

IV. Suitability of Livestock Grazing at Continued Levels

ONDA commented that because the BLM failed to conduct an analysis of the suitability of continued grazing in the LCGMA during the course of the SEORMP planning process, the agency should conduct that analysis during this process. Reason **[B24]** *Without explanation, the BLM completely misrepresents ONDA's comment, claiming that "ONDA's underlying premise appears to be that the government should guarantee conditions for sage-grouse and other wildlife similar to those found in a preserve, where nearly all potential adverse impacts are eliminated." Revised EA at 12. ONDA never asked the BLM to designate the LCGMA as a "wildlife preserve" and the BLM's attempt to characterize our grazing suitability comments as an unsupportable, extreme position fails to respond to the real issue raised.*

Response to **[B24]**: ONDA expressed the opinion their Comment #3 to the first edition of the EA (page 12) that they believe "BLM's strategy should include a significant reduction or elimination of major causes of disturbance, such as livestock grazing." BLM acknowledged the comment as one worthy of an answer and then used ONDA's statement as a primary heading for crafting that response.

Because BLM believes so many of the potential adverse impacts of the proposed action have in fact been mitigated or avoided for sage-grouse and other species according to existing management guidelines, the agency concluded in its response that ONDA's underlying premise appears to be that LCGMA should be free of nearly all adverse impacts to wildlife like in a wildlife preserve. Although BLM agrees that ONDA never directly requested LCGMA to become a preserve, their demands certainly imply the presence of conditions that can probably only be found in a preserve-like setting.

Finally, the most important point in regard to ONDA's "wildlife preserve" issue is that the BLM statement about wildlife preserve conditions had no connection whatsoever with the subject of livestock suitability. BLM's response to ONDA's Comment #3 (Revised EA, page 12) clearly show that BLM responded to ONDA about reducing or eliminating environmental impacts, and not grazing suitability, which is an entirely separate matter.

Reason **[B25]** *As ONDA explained previously, FLPMA requires the BLM to define which areas are suitable for specific uses. The BLM's assessment of the suitability of the public lands for continued levels, seasons of use and areas of livestock grazing is a decision that should occur at the RMP level of land use planning. See, e.g., Ore. Natural Res. Council Action, 148 IBLA 186, 189–90 (1999) (appropriate juncture at which to consider and decide "whether to allow grazing and at what levels is clearly beyond the scope of an activity level plan such as an AMP"). But because the BLM failed to undertake this analysis in the SEORMP, it must do so now.*

Response to **[B25]**: The Taylor Grazing Act of 1934, as amended, allowed for the establishment of grazing districts where the lands contained within were chiefly valuable for grazing and raising forage crops. Public lands within LCGMA, which are the subject of ONDA's protests, are located within established grazing districts. BLM has more recently addressed these areas

through the SEORMP land use planning process, and as part of this process decided to provide for a sustained level of livestock grazing consistent with other resource objectives and public land use allocations. The LCGMA process and this decision accomplish this.

In completing the LCGMA Standards of Rangeland Health Evaluation, the Revised EA, and the Proposed Decisions, BLM relied on the most recent available information to determine that grazing use at the proposed levels is sustainable. Long-term monitoring information, such as vegetative trend, utilization, and actual use, were reviewed and relied upon to ensure that grazing systems described in the Proposed Decisions were feasible, attainable, and sustainable, while allowing for areas not meeting standards for rangeland health to improve. Trend data for allotments and pastures in LCGMA can be found in the Evaluation, Chapter 2, pages 4— 24. Actual use and utilization data for pastures within LCGMA can be found in the Evaluation, Table 3, pages 1—16.

At any rate, the BLM itself argues in the SEORMP that grazing decisions should be made on a more site-specific basis, and that the "adaptive management" process will allow the agency to make necessary management changes as issues are identified over the life of the Plan. See SEORMP FEIS, Vol. 3 at 76 (SEORMP "does not identify site-specific livestock management actions that would be implemented with the signing of [the ROD]" and "[t]hroughout the life of the plan, the adaptive management process . . . would be implemented within GMA's [sic] and may result in site-specific reductions or increases in levels of authorized livestock use") (emphasis added); SEORMP at 111–13 (describing role of adaptive management in SEORMP implementation). If the BLM continues to decline to prepare AMPs for these allotments, though, the GMA process is the clear, logical, and only remaining place to undertake this analysis. See also Revised EA at 20 ("Because the LCGMA Evaluation and EA are considered activity plans, they serve the purpose of an AMP although they do not have that specific name").

Reason **[B26]** *In response to ONDA's comments regarding considering a range of authorized AUMs, the BLM claims that "the management solution for meeting riparian and water quality standards is not about reducing numbers of livestock on upland rangelands, but about the timing and season-of-use in which livestock utilize affected riparian stream systems in these pastures." Revised EA at 21. This unsupported justification is flawed because it relies on a shell game in which the same unsustainable numbers of livestock are simply shifted to other portions of these public lands. Because the current levels of grazing resulted in significant damage, such that the BLM determined grazing was failing to satisfy rangeland health standards and required an immediate change, the onus is on the agency to support its claim that simply moving the same numbers of livestock to different areas at different times will not result in significant adverse impacts.*

Response to **[B26]:** ONDA's claims that the current and proposed levels of livestock use in LCGMA are unsustainable are unfounded and unsupported since the actual use and utilization data, found the Evaluation, Table 3, show that current stocking rates largely result in utilization levels found to be within the proposed maximum allowable utilization limits. Table 3 of the Revised EA shows that there would be very little change in the amount of AUMs authorized for pastures within LCGMA under the preferred alternative compared to that of the current authorization, and therefore excessive utilization is not likely tooccur. By implementing the preferred alternative, significant adverse impacts will not occur on other portions of these public

lands because actual use by pasture is to remain similar and pastures where late season use will occur have very little, or no, unprotected riparian areas.

Based on results obtained in the adjacent Trout Creek/Oregon Canyon Mountains, BLM is confident that season of use changes for pastures with riparian areas failing to meet standards for rangeland health will result in the eventual attainment of these standards. See the Revised EA at page 21.

Reason **[B27]** *This reasoning is also flawed because the preferred alternative relies heavily on re-growth to meet standards and objectives. As ONDA indicated previously, the currently persisting drought conditions in the LCGMA mean that there will not be enough significant re-growth to sustain the currently authorized/proposed numbers of livestock while still protecting riparian and upland habitats. And without an explicit drought policy and terms and conditions appearing anywhere in the EA, there can be no assurance that the agency will manage its proposed grazing system to account for times when a reliance on re-growth will prove futile.*

Response to **[B27]**: BLM's reasoning is not flawed concerning ONDA's comments about re-growth. BLM is only expecting to observe vegetative re-growth in the perennially wetted portions of streams and other riparian areas. This re-growth will allow riparian areas to filter sediment, store additional water and provide shade as stated on page 21 of the Revised EA. As the perennially wetted areas expand due to greater water storage capabilities, riparian vegetation will also expand, and these systems will move towards attainment of standards, a situation that BLM has shown to occur in the nearby Trout Creek/Oregon Canyon Mountains under this type of grazing system. Because vegetative re-growth will be occurring in perennially wetted areas, current drought conditions will have little or no effect. Therefore, ONDA's concerns about relying on re-growth to meet standards for rangeland health in relation to drought are unfounded.

In the uplands of LCGMA, BLM is not relying on vegetative re-growth to sustain livestock grazing. The re-growth is for the sole purpose of improving riparian health and function.

BLM does not base long-term planning and development of grazing systems on less-than-normal periods of moisture. Therefore, drought conditions do not need to be addressed in documents which issue grazing permits. However, BLM does consider drought conditions, as well as other circumstances that limit forage production, in annual grazing authorizations. Regardless of grass production and the persistence of drought conditions, maximum utilization limits which are terms and conditions of these grazing permits are not to be exceeded. Rangeland vegetation is protected regardless of productivity and drought conditions, because once the appropriate maximum utilization limit is reached or the scheduled use period ends (whichever comes first), livestock will be removed from that pasture in accordance with the terms and conditions of the term grazing permit.

BLM based the grazing system and stocking rates of the LCGMA preferred alternative on our best available long-term monitoring information, such as vegetative trend, actual use and utilization and concluded that long-term trends prove that current and proposed stocking rates to be appropriate and sustainable once the preferred alternative is fully implemented.

Reason **[B28]** *The BLM again is at pains to emphasize that just because the six pastures that failed to meet one or more standard due to current grazing practices account for about 42% of the LCGMA's half million-plus acres of public land, this does not mean all of those acres are failing to meet standards. ONDA never made any such claim. What the BLM still refuses to come*

to terms with is that the areas failing to meet standards are the critically important riparian areas. See Revised EA at 21 ("Therefore, only riparian areas, a small fraction of the 220,155 acres in these pastures, did not meet standards"). Failure to meet standards in these critically important riparian areas is incredibly significant. According to the BLM, "[a]lthough riparian areas and wetlands cover less than 1 percent of the [SEORMP] planning area, their ecological significance far exceeds their limited physical area. Riparian and wetland areas are major contributors to ecosystem productivity and structural and biological diversity, particularly in drier climates." SEORMP Vol. 1, at 62. These riparian areas provide critical food and shelter for fish and wildlife, affect the quantity and quality of water available, and help regulate the hydrologic regime. Id. In fact, one-third of the streams in the LCGMA are not meeting Standard 2 (Watershed Function—riparian/wetland), with 27% "Functioning at Risk, Trend Not Apparent," 5 reaches "Functioning at Risk, Downward Trend," and 3 reaches "Not Functioning." LCGMA Evaluation at 2-31 to 2-34; Table 4a; Errata Sheet. Seventy-five percent of the meadow/wetland complexes in the LCGMA are not functioning due to livestock grazing. Id. at 2-53.

Response to **[B28]**: It is BLM's interpretation that ONDA has twice before and is currently attempting to imply that livestock grazing conditions have caused failure to meet Rangeland Health Standards over the entire surface area of 6 pastures, 220,155 acres in total. BLM calls attention to Case No. 04-334-KI, the Plaintiffs Complaint, dated March 8, 2004, page 9, item 23, where they state:

> "The LCGMA Standards of Rangeland Health Evaluation indicates the BLM determined that standards were not being met, and livestock were the cause of the failure, on 6 of 21 pastures in the LCGMA. These six pastures account for approximately 220,155 acres of public lands, which is about 42% of the 523,000 acres of land the LCGMA encompasses."

And, in addition, on pages 6 and 7 of ONDA's comments to the Revised EA dated September 14, 2004, ONDA states:

> "Although the EA offers alternatives that would result in a range of authorized AUMs, ONDA and WWP are disappointed to see that the BLM's preferred alternative would result in no change in AUMs. EA at Table 1. Rather, the preferred alternative would relies on a series of "cow shuffling" exercises—via changes in season of use and newly-created fences and pastures—to authorize identical numbers of livestock in the LCGMA. This is particularly troubling in light of the fact that the need for the proposed action is based on the BLM's own rangeland health assessment findings that standard and guidelines were not being met, with current grazing as the cause of those failures, on 6 of 21 pastures in the LCGMA. See LCGMA Evaluation at 3-8, 3-16, 3-33, 3-36, 3-39, 3-46(6). These six pastures account for approximately 220,155 acres of public lands, which is about 42% of the land the LCGMA encompasses. See id. at Table 3."

ONDA continues to assert that BLM refuses to acknowledge that the areas failing to meet standards are the critically important riparian areas. If this were true, BLM would not propose changes to livestock grazing in uplands throughout the LCGMA, especially considering that the uplands met standards and grazing changes there were not called for. BLM has previously explained to ONDA that Horse Hill, Louse Canyon, South Tent Creek, and three other pastures were identified as not meeting Rangeland Health Standards 2, 4, and 5 associated with riparian

conditions, but these pastures met upland Rangeland Health Standards 1 and 3. Therefore, only riparian areas, a small fraction of the 220,155 acres in these pastures, did not meet standards. The management solution for meeting riparian and water quality standards is not about reducing numbers of livestock on upland rangelands, but more about the timing and season-of-use in which livestock utilize affected riparian areas in these pastures. By reducing the period-of-use and allowing for regrowth of riparian vegetation to occur, water quality and aquatic requirements will improve over time as vegetation expands within the stream corridor, provides shade, stabilizes banks, filters sediment, and stores additional water. Over the last 15 years, BLM has applied grazing systems similar to those proposed in this EA to numerous streams in Trout Creek/Oregon Canyon mountain pastures in southwest Jordan Resource Area, documenting significant improvement in riparian stream systems, including increased streambank stabilization and vegetative shading.

The EA still does not explain how maintaining status quo authorized AUMs will satisfy the rangeland health standards' requirement that the BLM must make "significant progress" toward conformance with the Standards & Guidelines. See 43 C.F.R. Part 4180. ONDA stated in its previous comments that the preferred alternative actually proposes an increase in AUMs over the current management situation, which is the "interim" grazing strategy.The BLM confuses the terms "current management situation" with "current authorizations" and strikes down the straw-man argument that the preferred alternative does not propose to increase AUMs over currently authorized numbers. Revised EA at 21. There is no question the "interim" grazing system is the current management on these allotments. Because this current management system was, according to the BLM, established in order to satisfy the Rangeland Health Regulations' requirement to make changes to grazing before the start of the next grazing season, the "further" changes analyzed in this EA must necessarily be compared to the "current" grazing system. If "[t]he 'interim' grazing strategy is not he 'currently authorized' strategy," Revised EA at 22, then what has the BLM been signing off on in its annual grazing authorizations? Reason **[B29]** *In the end, this roundabout discussion of what the BLM wants to compare its alternatives to fails to answer the original issue raised: How will maintaining status quo authorized AUMs and increasing AUMs from the current management situation (i.e., the interim strategy) satisfy the Rangeland Health Standards?*

Response to **[B29]**: As a result of the LCGMA process, permitted AUMs have not been reduced on allotments. The actual grazing use that has been authorized for the various allotments within LCGMA since the interim strategy was developed and implemented is less than that which is allowed by permittees' term grazing permits. The reason that there are fewer AUMs being authorized under the interim strategy is that with no additional rangeland projects in place to protect riparian areas not meeting standards for rangeland health, livestock absence after July 15 (or July 31 depending on the pasture) is the only way to protect these areas. Restricting grazing use to before mid to late July in pastures not meeting riparian standards made some pastures in LCGMA nearly unavailable for use and resulted in fewer AUMs authorized and used.

The upland conditions of pastures within LCGMA are healthy and meet standards. The reduced level of authorized AUMs as a result of the interim strategy was not the result of limited forage, but rather a need to protect riparian areas that were not meeting standards for rangeland health and allow them to make significant progress toward fulfillment of the standards as required under 43 CFR § 4180.2(c). When the rangeland improvement projects identified in the preferred alternative are constructed, grazing will be authorized as outlined in the preferred alternative. The environmental impacts of these proposed rangeland improvement projects and the grazing

systems have been fully analyzed in the Revised EA. Once the preferred alternative is fully implemented, riparian areas will be allowed to make significant progress toward fulfillment of standards by allowing for vegetative re-growth in perennially wetted areas, and authorized AUMs will no longer need to be restricted because rangeland projects will be in place to protect riparian areas.

The way in which riparian vegetative re-growth will improve riparian condition and allow these areas to make significant progress toward fulfillment of standards has been discussed in the Revised EA. See also response to **[B27]**.

Similarly, the BLM continues not to provide any insight to or support for its proposal to adopt a grazing strategy that relies heavily on re-growth following early season grazing. At a minimum, adjusting season of use to early season grazing and away from hot season grazing should be coupled with reductions in AUMs. As stated previously, although a move away from damaging hot season grazing is important, the drought conditions present in the LCGMA mean that there will not be enough significant regrowth to sustain the currently authorized/proposed numbers of livestock while still protecting riparian and upland habitats. Also, how does the proposed action comply with the BLM's statewide drought policy? What specific measures is the Vale District using to assess drought conditions and vegetative and other resources' responses to drought conditions? The EA indicates that the BLM has developed "drought specifications" and provided those to the permittees, but it fails to describe those specifications in the EA and analyze how they impact the alternatives and the agency's various assumptions. See Revised EA at 24 (stating only that "[r]ange readiness" is determined by considering last year's weather and sometimes additional past years' weather).

Reason **[B30]** *ONDA also noted that while shifting from hot season to early season grazing may provide some benefit to riparian vegetation, it is detrimental to biological crusts. The BLM's only response to this issue is that it "thoroughly discussed" the impacts of grazing on crusts in the EA. Revised EA at 25.*

Response to **[B30]**: The BLM did indeed "thoroughly discuss" and analyze the impacts of early season grazing on biological crusts in the Revised EA. While the Bureau found that the proposed grazing system would incur some level of disturbance to crust, nevertheless impacts to biological crusts would be reduced compared to the previous grazing system. A portion of the analysis for the proposed alternative is included below:

> "Proposed grazing systems would have some level of disturbance to biological crust, although disturbance would be less than existing conditions. Because biological crusts on fine-textured soils are less susceptible to disturbance when crust is dry (USDI 2001), livestock grazing in pastures during the summer and early fall would affect crusts less than grazing during late spring. Grazing during high moisture conditions in mid- to late-spring would have the greatest potential to disturb crust, although many pastures would be in a rest/rotation system that would allow some recovery from disturbance. Because biological crusts are less vulnerable to disturbance in all soil types when soils are frozen or snow covered (USDI 2001), crusts occurring in turn-out pastures (Feb-Mar) would be the least affected by livestock grazing while these climatic conditions exist. Biological crusts in pastures with crested wheatgrass seedings would continue to receive disturbance from livestock grazing equal to historic rates. The three highest elevation pastures would receive a reduction of grazing time ranging from 40 to 90 percent." Revised EA, p 137

Reason **[B31]** *Although the agency correctly claims it cannot cite every single scientific source on a given resource issue, Revised EA at 28, the reliance on the agency's TR-1730-2 does not make up for neglecting important research that has emerged in the four years since that publication was released.*

> Response to **[B31]**: The BLM regrets its inability to include biological crust literature from the years between the 2001 publication of Technical Reference 1730-2 and the 2004 submission of the Environmental Assessment. However, in order to complete the extensive compilation and analysis that the EA required, the Bureau needed to terminate the perusal and acquisition of additional academic material. The BLM is not aware of any new research that would alter its findings concerning impacts of its actions on biological crusts, nor is there the possibility of acquisition by BLM of new information on distribution or abundance of crusts across the LCGMA landscape until completion of projected ESI surveys.
>
> In addition, the BLM is bemused by ONDA's implied discounting of Technical Reference 1730-2 as a sufficient or important source of information on biologic crust. In an earlier complaint ONDA took the opposite tack, and was concerned that the BLM had not made full use of the document and stated that "the omission of this Technical Reference is particularly significant because the publication not only provides one of the few comprehensive reviews of the ecological role of, and effects of land management on, crusts in arid land ecosystems, but it also includes detailed descriptions of monitoring methods". Memorandum in Support of Plaintiffs' Dispositive Motion –Case No. 03-CV-1017-JE p 20.

ONDA also commented that the BLM should engage in an actual, detailed suitability analysis to determine whether the proposed grazing systems would satisfy statutory and regulatory standards—including the requirement to "prevent unnecessary or undue degradation" and the requirement to insure no "permanent impairment" of the public lands or their natural resources. The EA envisions the proposed upland fences and new pipelines as beneficial because these projects would result in more "evenly distributed" grazing in the upland areas. Reason **[B32]** *But the BLM essentially brushes off ONDA's request for a more thoughtful discussion of the price to be paid for this decision with respect to introducing large numbers of livestock to areas that have been virtually ungrazed previously, basically falling back on the fact that because these sagebrush areas are in better shape than some in the Vale District, this type of concern is unwarranted.*

> Response to **[B32]**: The LCGMA decisions, which will result in the issuance of 5 new grazing permits that continue livestock grazing, do not propose introducing large numbers of livestock into areas that have been "virtually ungrazed previously". What BLM's preferred alternative will do is make grazing use more consistent in some areas where livestock dispersal and use depends on reservoirs filling with water. During some years, conditions are not adequate to cause water to run off and fill reservoirs so the forage surrounding these water sources would be unavailable to livestock. BLM is not proposing to increase the number of livestock that currently graze in LCGMA and AUMs are remaining approximately the same as current grazing permits allow. BLM is not proposing to allow grazing to occur in previously ungrazed areas within LCGMA. New pipelines and pipeline extensions would merely place reliable livestock water in areas that

are currently and historically grazed when reservoir water is adequate to disperse livestock. Constructing rangeland improvement projects, which allow livestock to graze in areas that were previously ungrazed, is discouraged in the SEORMP FEIS at page 19. Consequently, BLM made every effort to avoid placement of rangeland improvement projects in such areas or design grazing systems that would compromise these areas and therefore ONDA's claims are not legitimate.

Constructing new pasture division fences will divide some larger pastures into smaller ones. As mentioned on page 103 of the Revised EA, smaller pastures will likely result in a more evenly distributed utilization because livestock will not be allowed to range as far from water sources in some instances due to new fencing. BLM has reviewed the most recent utilization data for pastures to be divided and, based on that and other information such as pasture size and AUMs authorized by pasture, grazing utilization is likely to remain within acceptable levels.

Fencing to create smaller pastures, new pipelines and pipeline extensions will act to even out utilization and this will only benefit rangeland vegetation when grazing use occurs at acceptable levels. Rangelands in LCGMA will benefit because these projects will make a greater area consistently available to grazing use instead of concentrating grazing around fewer watering areas during years when reservoirs are dry. Based on the terms and conditions in LCGMA grazing decisions, maximum allowable utilization limits will be adhered to and will ensure the health of rangelands in LCGMA.

V. Undisclosed Presence of Potentially Threatened or Endangered Species

Reason **[B33]** *The EA still contains nothing about the presence of rare and sensitive mollusk species in the LCGMA and how those species may be affected by the grazing management actions analyzed. The BLM argues it need not present, assess or discuss the Frest report's findings because no descriptions of new species have been published. Whether new scientific information has been published yet or not is a separate question from NEPA's requirement to disclose and consider potentially relevant information during the public planning process and FLPMA's requirement to conduct a multiple use balancing when it makes this type of land management decision. The BLM must present the information it contracted with Frest to obtain, and then described why that information is or is not relevant to the decisions being made.*

Response to **[B33]**: In the Revised EA, Responses to Public Comments, pages 28-31, the BLM addressed Frest's report findings, their relevancy, and why the species information that Frest was contracted to obtain was not presented in its entirety. To reiterate, the BLM considered the data on snail taxa to be preliminary, incomplete, and inconclusive. Whether or not new information is scientifically valid *is* relevant to public disclosure, because it is not reasonable for BLM to provide potentially erroneous or misleading data. Determination of the scientific validity of mollusk taxa is the responsibility of USFWS and peer review within the academic community, and is beyond the purview of the BLM.

The BLM has already addressed ONDA's complaint that "*The EA still contains nothing about how sensitive mollusk species may be affected by the grazing management actions analyzed*" in

the Revised EA, Responses to Public Comments, ONDA Comment #26, pages 28-29. The BLM's response is reproduced below:

> "BLM concurs that specific mollusk species were not discussed in the EA, but the possibility of the presence of rare and sensitive aquatic invertebrates within the GMA was addressed in both the EA and the LCGMA Evaluation (Chapter 2, p 50-51). The EA analyzed impacts to Aquatic Species and Habitats (pp 133-140) across all alternatives, where "Aquatic Species" includes mollusks and other invertebrates. The EA concluded that all alternatives except Alternative II (the existing condition) would provide long-term improvement to aquatic habitats and would meet the SEORMP ROD Aquatic Habitat Objective to 'restore, maintain, or improve habitat to provide for diverse and self-sustaining communities of fishes and other organisms.'
>
> "The Evaluation (Chapter 2, p. 51) states that "it is expected that spring systems that meet Standard 2 (Watershed Function—Riparian) should provide habitat that sustains healthy invertebrate communities, and that these systems will also meet Standard 5 for riparian species." The BLM is aware that those riparian areas assessed as Functioning-at-Risk or Non-Functioning, including both spring and stream areas, do not provide habitat of acceptable quality for aquatic species and therefore has proposed appropriate changes to riparian management in the EA.
>
> For the mollusks that inhabit the Owyhee River corridor mentioned in the mollusk inventory Progress Report (Frest, July 2003), impacts to habitats from grazing management actions are moot. Grazing is precluded from most of the river corridor, and the upstream reaches of the mainstem Owyhee River corridor where the survey occurred were rated in Properly Functioning Condition and meeting Rangeland Health Standard 2 (Watershed Function—Riparian). Therefore, spring and seep invertebrate habitats in this segment of the Owyhee River corridor are healthy and are not in jeopardy from inappropriate grazing practices or other BLM actions. Mollusk inventory has not occurred in the West Little Owyhee River, but because of recent court injunction, grazing is precluded within this corridor as well, and riparian areas along this river also meet Rangeland Health Standard 2. Aquatic invertebrate habitats are protected and healthy."

VI. Defunct Rangeland Projects

Reason **[B34]** *The BLM does not respond to ONDA's comments regarding the effects and cumulative impacts of the proposal with respect to existing, operative, or defunct rangeland projects.*

> Response to **[B34]**: ONDA's statement is not true. BLM did respond to ONDA concerning wildlife habitat and livestock water development on page 9 of the Revised EA. See also response to **[B40]**, below.

VII. Water Quality and Quantity

Reason **[B35]** *ONDA commented that the EA does not assess the impacts of large amounts of livestock waste deposited on the land under the continued high stocking rates proposed in the EA. The BLM produced new information on E. coli levels present in portions of the project area, but still does not adequately discuss the impacts of the proposed action on water temperatures. This includes discussing how the authorized grazing will comply with state water quality standards. See 33 U.S.C. 1323(a) (actions authorized by federal agencies must comply with state water quality standards).*

> Response to **[B35]**: BLM has provided all existing water temperature data available for the LCGMA in Chapter 2 of the Evaluation. There are no perennial streams within the LCGMA on Oregon's 303(d) list of impaired water bodies for temperature or other parameters. TMDLs for the Owyhee Basin have not been established. Because available site-specific water quality data were limited for LCGMA, assessing Rangeland Health Standard 4 (Water Quality) was done mainly through evaluation of assessments for Rangeland Health Standards 1 (Watershed Function –Uplands), Standard 2 (Watershed Function –Riparian), and Standard 3 (Ecological Processes). Impairment to physical conditions of stream channels and uplands in addition to woody and hebaceous riparian vegetation that presently affect or would potentially affect water quality were identified through the rangeland health assessments. Information from all rangeland health standards were consolidated for all streams and uplands within a pasture and serve as rationales for each pasture determination. Upon evaluation of the rangeland health assessments, the LCGMA ID Team developed recommendations on how to improve existing conditions within each pasture.

Reason **[B36]** *Again, given the widespread ecological problems the BLM has documented across this landscape, any new grazing plan must be accompanied by a much more protective level of utilization, trampling standards and other mandatory, measurable use standards. The BLM states it has "proven" that it can satisfy water quality standards without any mandatory, quantifiable standards for stream and riparian habitat. Revised EA at 34. Instead, the Revised EA continues to argue that so long as objectives such as re-growth re-growth of riparian vegetation are met, the agency has satisfied its duty.*

> Response to **[B36]***:* BLM calls ONDA's attention to the correct wording on page 34 of the EA. As stated previously, BLM has implemented grazing systems for riparian areas in the Trout Creek/Oregon Canyon Mountain pastures similar to those proposed for LCGMA. The Trout Creek Mountain pastures are progressing toward desired future conditions and BLM has documented through annual monitoring that, in general, mandatory, quantifiable triggers for movement are not necessary for riparian areas if desired objectives (such as regrowth of riparian vegetation by the end of the growing season) are being met. Additional labor-intensive and time-consuming quantifiable standards may only be useful when monitoring results indicate that objectives for riparian and upland areas are not being met. BLM has proven that grazing systems can improve riparian areas and that it is not necessary to institute mandatory, quantifiable standards as long as objectives are being met.

Reason **[B37]** *The only quantifiable measure the BLM will use is a woody browse standard. However, the proposed decisions suggest this is simply a monitoring item under adaptive*

management, rather than an actual mandatory standard that will be incorporated into annual grazing authorizations and renewed term grazing permits. See Proposed Decision at 11–12.

Response to **[B37]**: BLM calls ONDA's attention to Proposed Decision at page 8, terms and conditions of new grazing permits, "bullet" No. 3: "Maximum allowable utilization limit for pastures will be as proposed in the Evaluation and analyzed in the Revised EA, which is "light" use (21%-40%) of key plant species for native pastures. The maximum allowable utilization limit for woody riparian vegetation, specifically willow, is 30%." This is a mandatory standard in the terms and conditions of each permit. Pages 11-12 of the Proposed Decision explain the monitoring process.

VIII. Monitoring

Reason **[B38]** *ONDA pointed out previously that the EA did not address monitoring. Although the EA now cites relevant SEORMP monitoring sections, the document still does not discuss how land managers currently are monitoring the effects of grazing in the GMA and inventorying for baseline data, including in the two years since the BLM adopted the SEORMP. As ONDA emphasized before, and as the BLM has acknowledged, the key to implementing a successful "adaptive management" strategy is monitoring. Without continuous, rigorous and comprehensive monitoring, adaptive management cannot work. Again, photo monitoring and filling out qualitative PFC sheets is not the type of rigorous, objective and quantitative monitoring that will provide useful data on which to base future decisions. How can the BLM develop a grazing plan intended specifically to address riparian areas highly degraded by livestock grazing without even including bank stability and bank damage monitoring (and including explicit bank stability standards in annual grazing authorizations and term permits)?*

Response to **[B38**]: PFC assessments are assessments, and not a monitoring method, as ONDA implies. BLM does not plan on using PFC data for monitoring purposes. PFC assessments are simply a tool to be used by an experienced interdisciplinary staff to determine if riparian areas are functioning and, if not, what obstacles are standing in the way. In spite of several discussions with ONDA members involved in LCGMA, ONDA continues to misunderstand the difference between monitoring and assessment and how these two procedures are used to help manage natural resources.

Photo documentation is an approved method for riparian monitoring in Vale District (Oregon/Washington BLM *Rangeland Monitoring Handbook* 1988). Contrary to what ONDA believes, photos are an effective monitoring method because: (1) they can be done easily and rapidly; (2) when done properly, quantitative measurements of woody plant cover change can be determined and re-growth of herbaceous plants in meadow habitat can be documented; and (3) photos are an excellent tool to communicate with the general public about vegetation change in a non-technical way. For instance, stream-bank recovery has been demonstrated in BLM photos during the interim management period and yet no quantitative data was collected.

BLM acknowledges that quantitative data has its strengths. However, quantitative data are also subject to interpretation as are photo images. The agency has stated that it would acquire quantitative data on woody plants in riparian areas as a means to monitor grazing impacts, and

will also gather low-level imagery to monitor riparian trend, which can then be interpreted and quantified.

The BLM discussed and clarified LCGMA monitoring in the Revised EA, pp 34-35, in response to ONDA's earlier and quite similar comments. See response to **[C15]**.

IX. Cumulative Impacts

Finally, related to virtually every comment above, ONDA is concerned that the BLM has not adequately discussed the cumulative impacts of its proposed action. See 40 C.F.R. §§ 1508.7, 1508.25(a)(2) (NEPA requirements). Cumulative impacts are defined as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. Id. § 1508.8. Reason **[B39]** *The BLM must actually assess the cumulative effects of the proposed action, in particular with respect to wilderness resources, new fencing and water projects, impacts to sage grouse and pygmy rabbit populations and habitat, and weeds.*

Response to **[B39]:** In regard to wilderness resources, refer to response to **[B40]**. In regard to wildlife habitat, BLM has responded to ONDA and WWP about the potential impacts to wildlife habitat and the mitigations applied to actions proposed within LCGMA. Because of the detailed nature of the Bureau's comments and analysis (Comment Responses on pages 4 through 20 of the Revised EA, and EA analysis pages 150 to 186) they will not be repeated here. ONDA simply disagrees with BLM's analysis and conclusions and continues to imply that the only way to meet wildlife habitat needs is to remove livestock grazing use and all of the facilities needed for orderly administration.

A failure to do so leaves the EA in violation of NEPA. See, e.g., Klamath-Siskiyou Wildlands v. Bureau of Land Mgmt., 387 F.3d 989, 997 (9th Cir. 2004) (EAs did not sufficiently identify or discuss incremental impacts). An EA "may be deficient if it fails to include a cumulative impact analysis or to tier to an EIS that has conducted such an analysis." See Kern v. U.S. Bureau of Land Mgmt., 284 F.3d 1062, 1071 (9th Cir. 2002). Further, a mere listing of the cumulative effects is insufficient. Neighbors of Cuddy Mtn. v. U.S. Forest Serv., 137 F.3d 1372, 1379 (9th Cir. 1998).

Reason **[B40]** *The most significant omission in the Revised EA's discussion of cumulative impacts is with respect to the wilderness resource. See Revised EA at 208–210. There is no "discussion" of impacts to WSAs or non-WSA roadless areas that possess wilderness values or characteristics. (For that matter, the section is similarly conclusory in nature with respect to ACECs, special status plant species, soil, water, riparian and wetland areas, wildlife and wildlife habitats, special status animal species, wild and scenic rivers, and cultural resources.)*

Response to **[B40]:** Regarding wilderness resources, the Proposed Alternative of the EA states there would be retention of the management objectives that were established in the SEORMP ROD for these resources and resource values. The exception would be "non-WSA roadless areas that possess wilderness values or characteristics", which is entirely an ONDA creation and which

is not a BLM recognized or authorized land use category. BLM recognizes that wilderness characteristics may occur outside of wilderness study areas. However, it does not necessarily follow that all lands offering a wilderness characteristic will be suitable as wilderness nor is BLM obligated to provide some special management to retain this quality when it occurs. Refer to response to **[B17]** for effects on ONDA's proposed WSA units.

In regard to wildlife, aquatic species, riparian resources, and biological crusts, BLM has described in the EA the cumulative impacts of a wide array of interrelated agency actions and their expected impacts. This cumulative effects analysis was done with regard to the entire GMA land base including WSA's because it would be highly impractical (if not impossible) to try and sort out the amount of wildlife use within and outside of WSA's in any given year. As such, it is reasonable to apply the total cumulative impacts analysis to wildlife use and habitat within WSA's.

BLM has reasonably analyzed and considered the combined effects and interactions of the following factors in relation to a suite of wildlife and aquatic species important and representative of LCGMA: (1) existing and proposed land treatments; (2) water developments including pipelines, reservoirs, wells, and water troughs; (3) fencing; (4) livestock grazing use including trailing; (5) roads; (6) existing and future expected wildfire impacts; and (7) potential for invasive plant expansion and impacts. BLM has also indicated the scope and scale of any new adverse environmental impacts to wildlife, such as the number of miles of new fences and pipelines, and so the analysis is focused on important issues and it is much more than a mere listing of combined effects as ONDA suggests. Also see response to **[C6]**.

As ONDA has stated previously, the cumulative impacts to the wilderness resource of undertaking actions that potentially remove forever the possibility of wilderness designation on segments of the public lands that fit the agency's definition of lands worthy of wilderness protection, is an irreversible commitment. The failure to consider this impact and its cumulative impact across the landscape of the LCGMA, as well as broader landscapes, such as the Jordan Resource Area and Vale District, or the Owyhee Canyonlands ecoregion, is arbitrary and capricious and not in accordance with the law.

X. Conclusion

Reason **[B41]** *As ONDA previously recommended, the BLM should assess this project in a full EIS because the proposal covers a vast landscape with a host of special values and nationally significant lands.*

Response to **[B41]**: See response to **[B1]**.

PROTEST DOCUMENT "C"

Here are additional Protest points and comments of ONDA and WWP on the Louse Canyon GMA undertaking.

We Protest the Failure to Adequately Study and Address Impacts to Springs, Seeps, Wet Meadows, Springbrooks, Intermittent and Ephemeral Drainages, Streams

Reason **[C1]** *BLM must conduct a full inventory and assessment of the location, condition and characteristics of all spring, seep, wet meadows, springbrooks, intermittent and ephemeral drainages including historically wetted sites. BLM must study the role of historic and ongoing livestock grazing and trampling activity (and other disturbances such as roads, or existing or past livestock project developments or vegetation manipulation treatments) on these areas. Baseline data on flow rates, flow diminishment, shrinkage of wetted areas, and the link between watershed health and waters in wild lands) has not been collected. This is essential to understanding the impacts of altering these sites and the impacts of livestock use patterns and levels identified in the Proposed Decision. The inextricable link between the health of surrounding watersheds and the springs, seeps, wet meadows, intermittent and ephemeral drainages and the perennial drainages to which these areas are linked watersheds must be addressed.*

> Response **[C1]**: WWP implies that BLM must acquire research quality data in a rangeland assessment in order to be able to adequately analyze environmental impacts to riparian/aquatic habitats and biota. The intensity of data collection suggested by WWP over 500,000 acres of public land is simply impractical from both a professional staffing and a funding standpoint. Moreover, the level of data collection being demanded by ONDA is well beyond the scope of a Rangeland Health assessment and evaluation. For LCGMA, BLM has properly fulfilled its obligation to assess riparian conditions in relation to Oregon/Washington Rangeland Health indicators for Standard 2, Watershed Function—Riparian and Wetland Areas, and Standard 4—Water Quality. The BLM has acquired and used the best available data. See also response to **[C7]**.

Reason **[C2]** *A full suite of restoration actions for damaged, degraded, desiccated or diverted riparian areas must be assessed under all alternatives – including an array of passive treatments, such as stubble heights, significant rest to jump start recovery, and until recovery, then limited, if any grazing.*

> Response to **[C2]**: In the Revised EA, seven land management alternatives were analyzed and included an array of grazing regimes, some of which involved "significant rest" and extensive restoration actions.

BLM's own data and photographs provide evidence of the failure of past structural or excavational developments and its failed riparian management actions – especially accompanied by high livestock stocking rates that are slated to continue. Reason **[C3]** *Despite the damage it has caused in the past, BLM proposes to develop and irreversibly alter even more fragile springs, and allow re-development of failed projects without any data on spring characteristics or the aquifers to which the may be connected.*

> Response to **[C3]**: In contradiction to ONDA's assertion, the BLM does not propose any new spring developments in LCGMA. To the contrary, 6 developed springs will be abandoned and the

sites restored. Eighteen existing spring developments will be reconstructed in order to protect the spring source and adjacent riparian habitat from impacts while at the same time continuing to provide water for livestock. These reconstructions will greatly improve spring habitats compared to their pre-decisional condition.

Springs are "hot spots" of biodiversity in arid lands, and are often differentially impacted by harmful human activities. For example, 75 percent of 505 springs surveyed by Sada in northern Nevada were highly or moderately disturbed (Sada and Herbst 2001). Degradation of springs in the Great Basin is widespread. Their isolation and small size render many spring communities particularly vulnerable to disturbance and loss. Reason **[C4]** *The PD promotes further disturbance. "The continued development of springs for livestock by ranchers and state and federal agencies also poses a threat to the continued existence of spring biota".*

Response to **[C4]** : The BLM understands that livestock grazing poses a serious threat to spring communities, and for that reason the Revised EA has proposed changes in grazing seasons-of-use, protective reconstructions of existing developed springs, and does not intend any new spring development. See also response to **[C3]**.

These actions typically involve fencing off an area, immediately adjacent to springs, piping most or all of the water off the site to livestock tanks. Although some riparian vegetation may be retained, "the essential flowing character of the spring is lost, and often no exposed water remains on the surface". Livestock grazing poses a serious threat to spring communities. Livestock trampling reduces substrates to mud, can completely eliminate vegetation, and alters flow characteristics. The magnitude is likely great because of complete alteration of vegetation and substrate structure. www.biology.usgs/gov/s+t/SNT/noframe/gb150.htm

Reason **[C5]** *BLM has failed to follow necessary protocols to assess spring conditions in the LCGMA. Given the scarcity of springs across these allotments, the extreme damage that has been caused by livestock grazing and other disturbance, often coupled the ill-conceived developments that have occurred, often killing all natural water flows at spring sources, BLM must locate and provide reconnaissance level characterization of springs, delineate important species distribution and salient aspects of habitat, and unique circumstances/challenges) BLM must qualitatively sample riparian and aquatic communities to determine community structure quantitatively sample salient physiochemical elements to identify aquifer affinities. BLM must quantitatively sample to determine aquifer relations and dynamics, sample riparian and aquatic communities and habitats to determine spatial and temporal variation in environmental and biotic characteristics, and to quantitatively determine biotic and abiotic interactions. BLM must also examine the condition of the watershed both upstream and downstream from the spring site. BLM must then follow this with surveys that fully assess the ecological setting, and weigh the relative scarcity of values that may be impacted by management actions that are proposed.*

Response to **[C5]:** See responses **[C1]** and **[C7]**. The BLM has acquired and used the best available data.

Reason **[C6]** *For example, a growing body of science demonstrates that sage grouse avoid use of areas with vertical objects such as fence posts.*

> Response to **[C6]**: BLM addressed the potential impacts of fencing on sage-grouse in the Revised EA on pages 166-167. For clarification, wooden "H" braces (at ¼ mile intervals) and fence corners that comprise a portion of each fence provide raptor roosting sites, not steel fence posts. Steel fence posts used for pasture and allotment divisions do not provide enough surface area for large raptors to grasp and roost upon.
>
> Sage-grouse are routinely observed inside fenced exclosures or extensively fenced private lands. BLM does not in any way dismiss the potential risks and impacts of fences to sage-grouse but believes that here WWP is exaggerating and misinterpreting some facts. They imply that sage-grouse avoid fences altogether because of a behavioral response to fence post vertical structure. This characterization is misleading and inaccurate.

Thus, proposals to develop springs and construct exclosures around springheads may inhibit or preclude sage grouse use of critical water and brood rearing habitats. See Braun 1998, Connelly et al. 2000, Nevada Sage Grouse Management Guidelines 2000, Freilich et al. 2003, Connelly et al. 2004. With this growing biological evidence of the harm caused by fences, full consideration of stubble height triggers to protect these critically important riparian areas must be examined.

Reason **[C7]** *BLM ignores the unique value and regional significance of the upland springs and spring complexes it seeks to de-water and alter for livestock purposes in the LCGMA area. Except for the springs in Spring Creek Basin below the canyon rimrock of the South Fork Owyhee River there are no spring complexes in neighboring Idaho from the East Fork Owyhee south to the Nevada state line, and indeed no springs in uplands east of the South Fork and south of the East Fork until Duck Valley Reservation. Likewise, in the large Nevada BLM-administered Owyhee grazing allotment to the east and south of the LCGMA area (allotment comes to within around 3 miles of LCGMA area), a couple of springs exist only in the very southern portion of the allotment. In the Owyhee Desert area administered by Winnemucca BLM to the south of the allotment, springs are lacking over a huge area. Thus, the springs in the LCGMA are a critically important from a regional perspective.*

As part of such assessments, BLM must collect information necessary to assess the extreme importance of the LCGMA springs and the continuum of hydric and mesic vegetation communities in their vicinity to sage grouse, especially in providing essential summer brood rearing habitats (green forbs); to migratory birds (deciduous shrubs and trees); and many other important attributes vital to other native animals. Thus, in addition to all the important issues raised for consideration, the harmful impacts to sage grouse and other wildlife must be fully considered. In the Louse Canyon area, where water resources are so very limited, we believe all spring areas have great importance to sage grouse and other native biota, and activities that may inhibit use by these species, or reduce flows and areal extent of wetted areas are alarming! Given the scarcity of springs, seeps, wet meadows, all sites are are worthy of restoration to whatever potential can be achieved. Sadly, BLM fails to study the potential of any sites.

Response to **[C7]**: BLM has certainly not ignored that springs in LCGMA are important sources of water and succulent forage for sage-grouse brood-rearing activities. The Evaluation has highlighted the fact that water sources are limited in this assessment area and therefore additional studies are not needed to understand their importance as WWP suggests. The impacts of grazing use on riparian areas by cattle and the expectations for gradual riparian habitat improvement over time have been described in the revised EA.

In this paragraph, WWP introduces two important thematic points that are repeated throughout their protest about LCGMA wildlife populations and habitats.

First, WWP implies that BLM must acquire what amounts to research quality survey data in an assessment in order to be able to adequately analyze environmental impacts to wildlife. The intensity of data collection suggested by WWP is simply impractical at this scale (over 500,000 acres of public land in LCGMA) from both a professional staffing and funding standpoint. Moreover, the level of data collection being demanded by ONDA is not even within the scope of a Rangeland Health assessment and evaluation as defined by the agency.

BLM believes that intensive survey/monitoring efforts are certainly appropriate and necessary for special efforts including the one it funded through the Point Reyes Bird Observatory in the Toppin Butte ACEC. BLM has accomplished numerous similar efforts elsewhere and will continue to do so in the future. As BLM stated in the SEORMP FEIS, Volume 1, Chapter 2, pages 76-77:

> "Over the last three decades, BLM has gathered field data on the locations and habitats of the following former or current special status species: burrowing owl, long-billed curlew, sage-grouse, Mojave black-collared lizard, short-horned lizard, northern sagebrush lizard, western night snake, Columbia spotted frog, western toad, woodhouse toad, tiger salamander, northern bald eagle, northern goshawk, ferruginous hawk, Swainson's hawk, peregrine falcon, loggerhead shrike, California bighorn sheep, kit fox, western big-eared bat, Lahontan cutthroat trout, redband trout, and bull trout."

Instead of what WWP asserts in this protest, the Bureau's principle mission in a Range Health assessment for wildlife is sequential and straight forward; (1) observe and interpret predominant rangeland indicators according to agency guidance (2) compare those conditions with available science documents about wildlife and their habitats (3) use the best available information and observations to arrive at conclusions about the health of the land for key species of wildlife and (4) prescribe appropriate management for wildlife habitat. For LCGMA, BLM has properly fulfilled its obligation to complete these tasks.

Reason **[C8]** *BLM has not carefully examined the health and condition of all intermittent and ephemeral drainages. Often, water not only persists in intermittent and perennial drainages in pockets as a result of runoff, but seep, spring and mesic areas may be present, and interspersed along the length of these drainages. Erosion, downcutting and lowered water tables stemming from livestock grazing is often a primary cause of perennial reaches becoming intermittent.*

BLM has not revealed if stock ponds or other livestock facilities have been built/placed/gouged into or on top of spring, seep or meadow areas. Restoration potential must be assessed, and plans must be developed to restore such sites and increase perennial flow under all alternatives.

BLM must conduct studies of all desiccated, dried up, or otherwise altered springs, and develop plans for restoration of riparian area structure (areal extent of wetted area, native vegetation components), and flows. The benefits of restored or more natural springs to native species must be assessed. For example, what are the characteristics of a riparian community sufficiently restored to Columbia support spotted frogs?

> Response to **[C 8]**: BLM conducted PFC assessments on all intermittent and ephemeral drainages as well as spring and seep areas. We walked almost all of theses drainages or were flown to wetted sites by helicopter. BLM has produced nearly 400 photographs of these wetted sites and made these available to WWP. These photos portray many of the existing conditions that BLM is trying to remedy with the proposed grazing system changes and new trough placements outside of riparian areas. All PFC assessment field data sheets were also made available to WWP to review.
>
> Also see responses to **[C1]** and **[C7]**. The Columbia spotted frog is not known to occur in LCGMA.

Aquifer sources: Springs are supported by precipitation that seeps into soil and accumulates in aquifers (through fault zones, rock cracks, or orifices that occur where water creates a passage by dissolving rock) where it is stored. The hydrology of springs is affected by regional and local geology, and how water moves through an aquifer.

Perched aquifers often characterize high elevations, where local aquifer springs may be fed by adjacent mountain range precipitation, and may change annually due to recharge from precipitation in mountain range. They typically have cool water, and may dry out during extended droughts. *Regional aquifers* support warmer springs fed by several recharge sources that may extend over vast areas. Aquifer flow is complex, and may extend beneath several valleys and topographic divides. Seeps are small springs that support vegetation adapted to drier conditions. Springs may be small, but have larger aquatic habitats, and support larger riparian zones with moist-soil affinity species. Springs are characterized by the morphology of their sources.

Each spring and seep is a unique combination of physical and chemical conditions (Sada and Herbst 2001, Sada and Pohlman 2003). These, coupled with disturbance factors, are dominant influences on riparian and aquatic plant and animal communities. Highly modified springs have less diverse riparian communities, and may include non-natives, and upland-associated species. Plant and animal communities associated with spring-fed wetlands are a function of physical and chemical characteristics of water and soils, proximity to other aquatic habitats, and prehistorical connections with regional drainage systems (Sada and Herbst 2001, citing Hubbs and Miller 1948, van der Kamp 1995, McCabe 1998). Primary abiotic factors that influence biotic qualities of unmodified springs include habitat persistence, geographical and geological settings, and

aquifer dynamics Sada and Herbst 2001 (citing Ferrington 1995, van der Kamp 1995). Springs have a more integral connection with ground water than streams (Sada and Herbst 2001).

At Ruby Marsh, Sada et al. 2001 found that substrate composition, water depth, springbrook width, current velocity, conductivity and vegetation were most influential in affecting macroinvertebrate communities. Habitat condition strongly influenced biotic characteristics. Degraded conditions often masked the influences of natural events and chemical characteristics on the macroinvertebrate community structure.

Springs in the LCGMA have already suffered suffered significant impacts because of channelization, impoundment, removing water, being dug out for ponds and the introduction of non-native biota. Removing water from springs through diversion for water projects such as troughs reduces habitat for vegetation and aquatic biota by decreasing springbrook length, water width, water depth, and quantity of water available for vegetation. Groundwater pumping or surface diversion have decreased and dried up many springs and springbrooks in the arid West causing loss of populations and extinctions.

Riparian vegetation at springs may be restricted to area just along immediate boundaries of aquatic habitat, or may extend outward over much larger areas. Wider riparian areas occur where water seeps outward and moistens hydric soils. Species may be restricted to spring sources. Rheocrene-inhabiting species are more similar to stream-inhibiting species, and limnocrene species to lake or pool inhabitants. Springs tend to be more constant environments than other aquatic habitats.

Spring size and habitat conditions influence biodiversity of springs (Sada and Pohlman 2003, citing Sada and Nachlinger 1996 and 1998), with different species inhabiting spring sources than downstream reaches/springbrooks. Ephemeral springs and seeps with harsh environments may have fewer species.

Possible relict endemic taxa may occur in springs, including these allotments. These taxa include springsnails, endemic beetles and bugs (especially if springs have gravel substrates and fast flow). High animal species diversity may exist in springs, due to relative isolation, the presence of water, and their relict nature. Plant diversity and endemism may be high too.

Reason **[C9]** *Spring-fed riparian habitats are of great importance to wildlife species for roosting, food, and shelter. Higher quality springs have high structural diversity created by a dense undergrowth of tangled vegetation and debris.*

> Response to **[C9]**: WWP recites what BLM has acknowledged in Chapter 2 of the SEORMP FEIS (pages 69 through 71) relative to the importance of riparian habitat structure and wildlife values. WWP is vague here about what is meant by "higher quality springs", but clearly, high quality springs do not always and necessarily support extensive and well developed woody riparian vegetation as they imply here. Soil and landform character in combination determines the

complexity and type of vegetation (wildlife habitat) that can be supported regardless of the quality of the spring source.

Reason **[C10]** *This vegetation may be reduced by diversion, burning, vegetation control and grazing*, so suitable habitat is eliminated or degraded, with the result that the songbird nest parasite brown-headed cowbird can more readily invade and parasitize the nests of migratory birds.

Response to **[C10]**: BLM management within LCGMA does not include water diversion or burning within riparian habitat. Current degraded conditions reported in the Evaluation are expected to gradually improve over time as a result of adjustments in the timing of grazing use.

Migrating birds may use spring waters to drink, and vegetation and insects associated with springs to refuel. Migration stresses may cause insectivorous and frugivorous bird species to drink. Plus, granivorous species are more dependent on water. Birds are vulnerable to predation, and seek watering sites with greater tree and shrub cover. Areas with larger intact riparian vegetation may attract more migrants. Small mammals such as voles may be endemic to spring-fed mesic alkali wetlands. Water produces insects whose aerial life forms are eaten by both birds and bats. Insectivorous birds forage on deciduous foliage.

A spring creates a continuum of soil conditions from wet to moist to dry, each harboring plant and animal associations adapted to those habitat conditions. Reason **[C11]** *BLM must systematically inventory native fauna present in and near springs, seeps and springbrooks, over at least two years.*

Response to **[C11]**: See responses to **[C1]** and **[C7].**

As an example of breeding bird inventories (that should also be performed in the full spectrum of vegetation communities across a range of ecological conditions in these allotments), see Red Willow 2004, "Pinyon-Juniper and Juniper Birds". In this two-year study, breeding bird surveys were conducted in and near riparian habitats interfacing big sagebrush and pinyon-juniper communities. Reason **[C12]** *In the LCGMA, the continuum of vegetation communities associated with springs may be destroyed by sproing [sic] development, exclosure construction, and extensive degradation of areas surrounding exclosure fences* .

Response to **[C12]**: Spring exclosure fencing for 4 springs will be temporary and is designed to protect and restore riparian vegetation, not impact the "continuum of vegetation communities associated with springs." No new spring developments will occur. See also response to **[C3]**.

Reason **[C13]** *Aquatic biota must also be assessed. Sampling for invertebrates must include collection from all habitat types within a spring (spring, springbrook, degraded reaches, any undegraded reaches). All springs within the project area must be sampled for invertebrates.*

The link between the condition (health) of the watershed and the functionality springs and springbrooks must also be assessed.

Response to **[C13]**: See **[C1]** and **[C7]**. The BLM has acquired and used the best available data.

Anthropogenic disturbances like livestock grazing and other uses have degraded vegetation, increased water temperature, and increased fine sediments. Aquatic and riparian habitats can be degraded or eliminated through water diversion, intense grazing and trampling, and non-native plants. Springs have often been piped, spring brooks channelized, and excessive ground water withdrawal has occurred. This affects spring biota by decreasing habitat size (drying some habitats) and vegetative cover, and changing species composition.

Reason **[C14]** *Surveys should include: Locations, and type of spring - rheocrene/limnocrene/other, volume of spring discharge, springbrook length and depth, wetted perimeter width, DO, temperature, conductivity, pH, percent of emergent cover, percent and type of emergent cover, percent of vegetative bank cover, springbrook bank incision, spring brook bank stability, percent of wetted perimeter covered by watercress, substrate composition, animals present. Estimate site condition and identify influences causing disturbance, i.e. level and cause of disturbance, grazing, horses, diversion. "natural disturbances" – drought, fire, scouring floods, avalanche – however – these can be exacerbated – or caused – by grazing effects. Information on water rights filings and any tracking of spring flows over time should also be included.*

Multiple surveys are needed to measure discharge, which may vary seasonally or otherwise.

BLM must research any existing information on spring characteristics – flow rates, aquifer depletion, BLM's own records and project files regarding any spring or other developments, any water rights filings, any water rights surveys done by BLM, etc. BLM should also research any water rights filings by other parties on spring flows, or any waters where diversion/drilling/depletion may affect flow rates from springs in the project area (which includes other nearby lands important to special status species here, or to which springs may be linked). BLM must provide detailed descriptions of past projects – and promises made during authorizations, funding agreements, etc. and/or NEPA. This is necessary to understand all direct, indirect and cumulative impacts of actions affecting spring flows, health and hydrologic integrity. BLM must describe spring provinces/complexes/clusters, also.

What type of spring is it? What functional changes or changes in biodiversity have occurred? How can function and/or biodiversity be restored? What are flow rates throughout the year – under drought or normal conditions? What is the current areal extent of wetted area vs. historical? (Examine soil profiles and characteristics, remnant plant communities, etc.). What vegetation would be present in an undisturbed site? What is the potential of the site (vegetation, flows, habitat) if livestock grazing or other disturbance is removed? Reduced by one half? Reduced by 75%? How are livestock grazing or other disturbances in the watershed affecting aquifer recharge or flow rates?

How do runoff rates (and also recharge rates) from a watershed in pristine or good condition compare to the rates from watersheds in poor or fair condition? What is the condition of intermittent or ephemeral drainages in the watersheds? Is gullying, rilling, head-cutting or other erosion occurring, and how is grazing or other disturbance affecting this? What aquifer is each spring part of, and what are past, current or anticipated threats to these aquifers? How long will it take to recover flows to ¼, ½, all historically wetted areas of springs that have been highly degraded or altered through diversion? What are values of each spring as sheltering, rearing, feeding areas for sage grouse chicks, refueling stops for migrants, water for nesting songbirds across a land area, providing essential water to raptor chicks, etc.?

> Response to **[C14]**: See **[C1]** and **[C7]**. The BLM has acquired and used the best available data obtained from implementation of BLM's Rangeland Health Standards Manual H-4180-1 (2000) and Interpreting Indicators of Rangeland Health (2001).

Reason **[C15]** *BLM must commit to regular scheduled monitoring of many parameters – water quality, flow rates, aerial extent of wetted area, plant species composition trampling, etc.*

In review of many BLM riparian documents, such as subjective PFC assessments, we have frequently noticed a bias towards rating areas in better condition if livestock grazing has not yet occurred in an area at the time the assessment is conducted.

> Response to **[C15]**: Perhaps ONDA has detected in some other jurisdiction what they consider to be biases toward higher PFC ratings when assessments occurred before grazing, but they are mistaken in thinking that PFC assessment bias has occurred in LCGMA. BLM conducted almost all PFC assessments in the LCGMA from mid August through September, 2000. All pastures with riparian areas had either been grazed by livestock or were currently being grazing as the ID team was conducting riparian assessments. Louse Canyon, Horse Hill, and South Trent Creek pastures, where approximately 80-90 percent of the perennial wetted riparian areas occur in the LCGMA, had livestock grazing authorized from July through October. All PFC field assessment sheets were made available to WWP for review, and therefore WWP's comment is unfounded. PFC assessments are to identify current physical and biological conditions within each stream reach assessed. PFC is not a monitoring tool. Once problems are identified through the assessment of PFC, proper actions need to be implemented and monitoring of those problems then occur to check if conditions are improving.

Reason **[C16]** *Thus, surveys must be conducted over multiple years, and must also include surveys during periods when livestock have been present for a significant amount of time – for comparison with any studies conducted in livestock-free periods.*

BLM cannot rely on monitoring only springs in better condition. Given the extreme damage that has occurred (and continues) here – all sites should be monitored. This must be done during the time of year when livestock are actually present in the allotments, and study impacts that are occurring throughout the period when livestock are present. These studies should be conducted

over multiple grazing years. Repeatedly, we have seen BLM blame trespass cattle for impacts to lands in the LCGMA, when in fact ongoing authorized grazing causes chronic degradation.

Under all alternatives, BLM must establish long-term monitoring of effects of levels and types of resource use to riparian and aquatic macroinvertebrates, quantitatively describe biotic communities. Initiate by establishing baseline conditions that identify spatial and temporal; variability in biotic and abiotic features (Sada and Herbst 2001). Quantify baseline conditions by describing changes in vegetation and invertebrate demography and assemblage structure; and the characteristics of riparian and aquatic habitats. Sample for sufficient time to encounter a broad range of environmental conditions and fluctuations in demography and structure. Long-lived species should be sampled for a long time, short-lives species – long enough to encounter environmental variability.

> Response to **[C16]**: the BLM has already addressed ONDA's concerns pertaining to monitoring, both short- and long-term, in the Revised EA, p 34. The BLM's response is repeated below:
>
> > "Monitoring is an important component of land management and part of the adaptive management process, and will be performed in LCGMA in accordance with the SEORMP. Specific monitoring methods utilized by BLM are described in the ROD, Appendix W. Monitoring activities are not necessarily included in EA's or EIS's (CEQ Regulations for Implementing NEPA) and managers have discretion in scheduling monitoring activities, determining monitoring approaches or methodologies, and establishing monitoring standards (NEPA Handbook H-1790-1). Consequently, specific monitoring details do not appear in this document.
> >
> > "However, the EA does address standard monitoring actions that would occur in both uplands and riparian areas. The preferred Alternative III in the EA set upland utilization levels in the "light" use category of 20-40%, with a target level of 30%. Utilization levels are monitoring annually in grazed pastures, and vegetation trends are measured periodically. BLM has described expected riparian recovery rates in the EA for riparian corridor fenced exclosures, in other proposed riparian exclosures, and in riparian areas in pastures that are utilized by livestock. These exclosures would be constructed at various sites to aid in determining the rate of recovery in riparian areas compared to riparian areas that are utilized by proposed grazing systems. Also BLM has flown extensive low level aerial photography (2002, 2003) of all riparian areas in the GMA to establish baseline conditions before proposed grazing systems are implemented. This established baseline information will aid in long-term riparian trend determinations as aerial photography is repeated. Once the decision process is completed, monitoring studies will be tailored to new grazing systems and applied to riparian/wetland areas in addition to existing RMO's." (Revised EA, p 34)

Reason **[C17]** *Macroinvertebrate and vegetation surveys should be conducted prior to implementing management actions that may adversely affect spring biota (Sada and Herbst 2001 at 14).*

Response to **[C17]**: See **[C1]** and **[C7]**. The BLM has acquired and used the best available data obtained from implementation of BLM's Rangeland Health Standards Manual H-4180-1 (2000) and Interpreting Indicators of Rangeland Health (2001).

These also serve as an environmental baseline to gauge any management changes. In order to be able to understand cumulative, synergistic or indirect impacts of proposed actions (and to adequately understand current conditions).

BLM must weigh the relative scarcity of undeveloped springs in this arid landscape, and the increasing loss of springs across the region.

Intermittent/Perennial Drainages

Reason **[C18]** *For all streams and springbrooks in or related to the project area and species of interest, BLM must assess the following: How has vegetation been changed, reduced, eliminated? How have channels been widened or degraded? Have water tables been lowered? Has erosion potential increased? How have these effects impacted habitats for raptors, sage grouse and other special status and important species?*

How does livestock consumption of overstory vegetation, elimination of shady cover, trampling of banks, etc. affect water quality (temperature, sediment, bacteria, algae) and aquatic species presence and habitats? What are the characteristics of the banks in areas accessible to livestock use? How is livestock grazing affecting recruitment of young willows and other riparian plants, and altering structure of older or mature shrubs and trees?

What was the historical potential of the site? What would the potential of the site be under rest from livestock grazing (coupled with flow restoration if large volumes are diverted or the spring is damaged by diversion) in 5, 10, 15, 20 or more years? How much more quickly would sites heal if livestock were removed to jump start recovery?
How is livestock grazing or other current disturbance (of the stream and its watershed) affecting vegetation, banks, water quality, aquatic species, flow, stream morphology?
How is livestock grazing or other disturbance contributing to the intermittent or ephemeral conditions of the stream or spring brook?

For all riparian areas, BLM must pay particular attention to livestock trampling impacts, as over time, trampling of clay soils near springs may seal the spring, causing it to dry up completely. Plus, BLM must assess the impacts of intense or concentrated livestock use in areas in the vicinity of riparian areas, i.e. troughs or dug out ponds outside small exclosures.

Response to **[C18]**: Through the Rangeland Health Standards and Guides assessment process described and analyzed in the Evaluation and the Revised EA, the BLM has assessed impacts of livestock on vegetation, stream channels, bank trampling, wildlife habitat, recruitment of willows and other riparian plants, erosion, water quality, and many other parameters. In the Revised EA

the BLM already analyzed the efficacy of various grazing systems, including rest, for riparian restoration and improvement.

Reason **[C19]** *BLM must collect detailed water quality measurements throughout the time when livestock are present, as well as during spring runoff to assess livestock impacts to water quality. BLM must fully consider the relative scarcity of these values in the arid landscape when balancing uses.*

Response to **[C19]**: See responses to **[C1]** and **[C16]**.

We Protest the Dearth of Data on Playas

Reason **[C20]** *BLM fails to provide any assessment of the health of playas in these allotments.*

Response to **[C20]**: BLM agrees that playas are important to native wildlife, especially for migratory birds in spring or fall when water is present. BLM also recognizes that certain management actions such as reservoir development (excavation) within a playa can cause damage to their hydrologic and biological functions. However, no reservoir development actions within playas are proposed in the EA and so no change to existing conditions would be expected to occur.

Finally, WWP did not even identify playa conditions as a management concern of theirs during LCGMA scoping so their status was not addressed in the assessment and evaluation. As a matter of fact, WWP provided no LCGMA-specific wildlife scoping issues for BLM to consider at all in the assessment, but instead chose to wait until after the assessment and EA was completed before providing written complaints.

Playas seasonally retain water that may be critical to an array of native wildlife, and may also harbor unique biota. For example, a unique species of fairy shrimp was just identified in the Snake River Birds of Prey Area near Boise.

We Protest the Failure to adequately Address Desertification, Watersheds, and Lack of Sustainability uthe Proposed Action

There is an extensive body of scientific literature on desertification of watersheds, including in the western United States. Desertification is defined as: “a change in the character of the land to a more desertic condition”, involving “The impoverishment of ecosystems as evidenced in reduced biological productivity and accelerated deterioriation of soils and in an associated impoverishment of dependent human livelihood systems”. See Sheridan 1981, CEQ Report 1981 at iii. Major symptoms of desertification in the U. S. include: declining groundwater tables; salinization of topsoil or water; reduction of surface waters; unnaturally high soil erosion; desolation of native vegetation (Sheridan CEQ at 1). The existence of any one can be evidence of desertification. As lands become desertified, they become less productive, and activities such as livestock grazing become less sustainable. Continuing activities like livestock grazing may result in grazing becoming permanently unsustainable across the landscape. In many areas of these

allotments, ecological conditions because of desertification and degradation processes that have already occurred and which are still underway, may have already crossed the threshold between sustainability and, essentially, "mining" of increasingly non-renewable natural resources. Desertification can be both a patchy destruction, often exacerbated by drought, as well as the impoverishment of ecosystems within deserts.

Reason **[C21]** *The Louse Canyon GMA documents fail to assess the levels and degree of desertification that have occurred across these allotments and surrounding lands. This is necessary to understand the suitability of these lands for livestock grazing, the productivity and carrying capacity of these lands for grazing, the effects of any alternatives developed here, the ability to meet any objectives, and the ability to sustain, enhance or restore habitats and populations of special status and other important species and native plant communities. For example, how has the extensive depletion of understories in many areas of Wyoming big sagebrush areas (where small statured Poas or cheatgrass may now be the only understory plants in communities that at PNC would support lush bluebunch wheatgrass) affected the degree and rate of desertification processes across the allotments? How has this affected livestock patterns of use, acres per AUM, etc.? What are the acres per AUM across all vegetation types in all conditions across these allotments? How many acres per AUM are required to sustain cattle in each vegetation type in these allotments? What actions can be undertaken to halt desertification processes and begin recovery? BLM must also assess the combined effects of desertification and exotic species/weed increase and infestation.*

> Response to **[C21]**: ONDA's concerns over "desertification" in LCGMA are moot. The BLM has found no evidence of "desertification" or "the impoverishment of ecosystems as evidenced in reduced biological productivity and accelerated deterioriation [sic] of soils and in an associated impoverishment of dependent human livelihood systems." To the contrary, assessment data shown in the Evaluation and analyzed in the Revised EA reveal that 16 of 17 native LCGMA pastures meet rangeland health standards for both physical watershed function (Standard 1) and ecological productivity (Standard 3). All pastures, including the five non-native seedings, met Standard 1. In no case was failure to meet Standard 3 caused by livestock grazing.

Even PRIA acknowledged that production on many BLM lands was below potential, and would decline even further. Reason **[C22]** *To continue the current level of grazing under BLM's Proposed LCGMA Decisions will result in even further loss of soil, microbiotic crusts, water, watershed integrity, wildlife habitat, and forage on these allotments.*

> Response to **[C22]**: BLM has analyzed and disclosed in detail how the Proposed Action would result in habitat conditions that would substantially conform to desirable habitat conditions and recommended mitigations listed in the scientific literature and current BLM policy for greater sage-grouse. The rationale, which is quite lengthy and detailed, is contained in the Revised EA public comment responses (pages 4-18) and need not be repeated here. WWP clearly does not acknowledge any of the mitigating measures for wildlife habitat protection BLM will apply in accordance with the Revised EA on pages 211-212.

Reason **[C23]** *Do BLM's Decisions (and "Proposed Action") allow livestock numbers greatly in excess of those* ***actually grazed*** *here in recent decades? BLM has not provided information on actual use in areas throughout these allotments. The fact that AUMs/stocking rates below the high permitted levels may have actually been grazed, may be related to continued loss of productivity on these lands.*

> Response to **[C23]** The proposed and final decisions, which result in the issuance of five new grazing permits within LCGMA, do not allow for an increase in livestock numbers compared with those numbers actually grazed in LCGMA allotments in recent decades. This is based on actual use data which has been collected since 1978 for most pastures. This actual use data was made available in Table 3 of the Evaluation.
>
> The history of grazing use in LCGMA, based on the actual use data in Table 3 of the Evaluation, demonstrates that grazing use has occurred in the past at or near the levels that would be authorized by the preferred alternative. The best information available to BLM does not show there to be a loss in productivity for lands within LCGMA. On the contrary, BLM's assessment of upland conditions in LCGMA found these uplands to be healthy and functioning while stocked at levels similar to those proposed in the preferred alternative. See also response to **[B26]**.

Reason **[C24]** *Desertification symptoms in arid lands include: Sparsity of grass; presence of invading plant species - both native and non-native, in grass areas that have survived: plants are of poor vigor; topsoil losses - in many places, topsoil is held only by pedestals of surviving plants. Surface signs of soil erosion include: pedestaling, gullies, rills, absence of plant litter to stabilize soils. BLM has not conducted current Ecological Site Inventories across these allotments, nor has it presented evidence of depletion from past systematic surveys. Such studies are essential to understanding the degree of degradation, desertification and loss that currently exists. In addition, BLM has presented no systematic survey and mapping of vegetation communities that would demonstrate that its monitoring areas (key areas, utilization transects) reflect current conditions across the allotments*

> Response to **[C24]**: BLM explained in the SEORMP that Ecological Site Inventories (ESI) covering 4.5 million acres in Malheur County were scheduled to start in 2003. Because of funding and availability of staff, start up of the ESI effort was delayed until 2005. Full staffing of soil scientist and range staff for the survey will begin in spring 2006. The Vale District had requested ESI to start in Malheur County as early as 1991. This office has no control on funding availability or the order of priority of which county is scheduled before Vale District. Therefore we have operated with the best information available at this time. See also response to **[C21]**.

Desiccation and erosion caused by livestock can cause water tables to drop, rilling, gullying and arroyo cutting to occur, and result in sediment flow from degraded areas (Sheridan CEQ at 14). Grazing creates extremely dry site conditions for plants due to removal of litter, loss of soil cover, and trampling of the ground that prohibits rainfall from reaching plant roots (CEQ at 15). Livestock grazing exacerbates any climate changes and shifts that may be occurring (CEQ at 16). This is of particular concern in the arid LCGMA landscape periodically plagued with severe drought, and which is facing increasing heat and aridity due to global warming.

Reason **[C25]** *The near-absence of many species of native bunchgrasses, such as larger-sized native grasses from many areas of the allotments, such as the diminished state of the once abundant bluebunch wheatgrass (Oryzopsis hymenoides* [sic] *), signals stress of overgrazing (CEQ at 19.*

> Response to **[C25]** Vegetative trend data collected by BLM, and shown in Chapter 2 of the Evaluation, do not support WWP's claim. In fact, vegetative trend data collected for pastures comprised of native vegetation show that trend is static or upward for all native pastures in LCGMA. Past livestock grazing, at levels such as those proposed in the preferred alternative, have not resulted in excessive use or downward vegetative trend.

Absence of plant litter makes germination of natives more difficult. Recovery of lower elevation areas will be exceedingly slow, especially considering the aridity of the project area. Arid land recovers very slowly; massive soil erosion has exposed soils that are less able to support plant life because of lower organic content; and invader species have become well established and have the competitive edge (Sheridan CEQ at 21). Even though it is well recognized that "the way to end overgrazing is to reduce the number of livestock in the end" (Sheridan CEQ at 22), political pressures from ranchers results in strong political opposition to reduced grazing. Political pressures have hamstrung implementation of the Taylor grazing Act.

Reason **[C26]** *This GMA Assessment process provided BLM a special opportunity to gain a better understanding of the actual capability and productivity of the vegetation and soils that meets the desires and needs of the public on these lands. Regrettably, BLM failed to do so and illogically retains high stocking rates that are responsible for reduced plant vigor and productivity, degradation of soils, waters and biotic resources, and resource loss across these allotments.*

> Response to **[C26]** BLM completed a thorough assessment and evaluation of the resource conditions within LCGMA. The stocking levels that are incorporated into the preferred alternative of Revised EA# OR-030-04-013 are supported by actual use and utilization data which is represented in Table 3 of the LCGMA Evaluation and vegetative trend data found in Chapter 2 of the LCGMA Evaluation. The LCGMA vegetative trend data does not show there to be reduced plant vigor or productivity since long-term upland trend for native pastures in LCGMA have remained static or increased.
>
> The preferred alternative will allow areas that were not meeting standards for rangeland health due to livestock, which are mainly riparian areas, to progress toward attainment of these standards once new rangeland improvement projects are constructed and the new grazing system is fully implemented. See also responses to **[C23]** and **[C25]**.

Reason **[C27]** *Sagebrush communities are now showing signs of extensive changes and significant stresses, with livestock grazing and aggressive non-native weeds recognized as among important causal factors. Continued grazing disturbance, degradation and weed invasion will cause native plant communities to cross thresholds from which recovery is very difficult, if*

not impossible. The decline in sage grouse, pygmy rabbit and other populations of species dependent on arid land shrub habitats is a landscape-scale biological indicator that the loss of functions and values of sagebrush ecosystems are serious and widespread. These are also signs of desertification processes across the landscape.

> Response to **[C27]**: Sagebrush community conditions in LCGMA were described in the Evaluation and BLM has acknowledged various factors that influence wildlife habitat quality in the EA. BLM disagrees with WWP's appraisal of LCGMA rangeland conditions, which are backed up by opinion and no collected field data, and the inference here that the assessment area wildlife habitats are declining in ecological condition. Also see response to **[C22]**.

We Protest BLM's Failure to Management These Lands to Halt Further Imperilment of the Sagebrush Biome, and Consider Species Needs As Described Below

A recent analysis, Dobkin and Sauder 2004,"Shrubsteppe Landscapes in Jeopardy: Distribution, abundances, and the uncertain future of birds and small mammals in the Intermountain West", examined bird and small mammal species in the sagebrush biome. The authors found that "very little of the sagebrush biome remains undisturbed", the inherent resilience of the ecosystem has been lost and the ability to resist invasion and respond to disturbance has been compromised (Dobkin and Sauder at 5). At least 60% of sagebrush steppe now has exotic annual grasses in the understory or has been converted completely to non-native annual grasslands (citing West 2000). More than 90% of riparian habitats have been compromised by livestock or agriculture.

The authors distilled a list of 61 species of birds and small mammals that are completely or extensively dependent on shrubsteppe ecosystems, and conducted an analysis of their distributions, abundances, and sensitivity to habitat disturbance to assess current state of knowledge and conservation needs of these species, with focus on Great Basin, Interior Columbia Basin and Wyoming Basin, based on BBS data and other studies.

Reason **[C28]** *The Columbia Plateau, Great Basin and Wyoming Basin are among the* ***least sampled*** *of all physiographic provinces covered by the Breeding Bird Survey.* ***Remarkably little*** *is known about the actual distributions or population trends of small mammals. "Range maps created by connecting the dots among sites where a species has been captured do not paint a realistic picture, especially in the highly altered and fragmented shrubsteppe landscapes of today. For small terrestrial mammals … our results support the view that many of these species now exist only as small, disconnected populations isolated from each other … it is completely untenable to assume species' presence based on simply on presence of appropriate habitat in shrubsteppe landscapes of the Intermountain West". Also, the authors "find no reason for optimism about the prospects in the Intermountain West of any of the 61 species" (at 3). "The results of our analyses present an overall picture of an ecosystem teetering on the edge of collapse (citing Knick et al. 2003)".*

Response to **[C28]**: The fact that little information is known about small mammals and birds cannot be remedied in a BLM Rangeland Health Assessment for reasons already described under response **[C7]**.

The BLM is concerned over WWP's heavy reliance on non-peer reviewed literature, often commissioned by them or ONDA, as scientific fact. For instance, when WWP discussed declining trends of sagebrush species and why BLM must conduct exhaustive, microscale surveys and research to ascertain species status, WWP extensively refers to information from Dobkin and Sauder (2004), citing them 20 times between Comment pages 11-22. Sadly, Dobkin and Sauder's information has not been reported in a peer-reviewed venue therefore, its objectivity is in question.

The Dobkin and Sauder paper states that it is a "broad scale" assessment (executive Summary at paragraph 2) and BLM agrees with the broad scale generalizations described. However, WWP then applies these broad scale statements which are more typical of low elevation rangelands (generally below 5,000 feet in Malheur County) inappropriately. LCGMA is not a predominantly low elevation, highly fragmented landscape, as this paragraph suggests, and a majority of the upland plant communities present are in fact healthy and resilient due to soil, climate, and landform character. Even at lower elevations within LCGMA, invasive plants such as cheatgrass are having little or no influence on wildlife habitats.

The "teetering ecosystem" comment is also in reference to locations where fires and cheatgrass invasion are impacting sagebrush habitats, which BLM acknowledged in the original and revised EAs.

Reason **[C29]** *This highlights the need for Vale BLM to conduct a systematic and comprehensive on-the-ground survey and assessment of species presence and habitat presence and quality on these allotments and surrounding lands. BLM had an opportunity in this process to act to identify important components of native biodiversity on these lands – and, armed with this knowledge, take management action to enhance and restore these species habitats and populations before it is too late.*

Response to **[C29]**: Refer to response **[C7]**.

Reason **[C30]** *We appreciate the breeding bird surveys that have been conducted here by Point Reyes. It must be emphasized that the Toppin Butte site is grazed VERY LITTLE IF AT ALL due to its distance from water sources and other factors. This demonstrates the need to further limit livestock use of areas, instead of seeking to expand and extend impacts into new or less used areas, as is done under the Proposed Action in LCGMA. BLM fails to take measures to address the great risks to sagebrush habitats – yes, a veneer of sagebrush may remain, but depleted understories and damaged soils and microbiotic crusts place sagebrush communities across these allotments at great risk to conversion to exotic annual grasslands or weed infestation. BLM's decision does not act to protect and enhance habitats critical for a wide range of sagebrush species. See Wisdom et al. 2000.*

Response to **[C30]**: WWP reaffirms what BLM has already stated is typical for much of LCGMA: livestock impacts are limited by water availability and those conditions will continue to be present over much of the area even with the additional water developments planned under the proposed action. LCGMA is a very large land area indeed and cattle simply cannot graze and impact all of the available rangeland present.

Sagebrush Mammal Summaries (based on Dobkin and Sauder 2004:

11 of 24 mammals in the report by Dobkin and Sauder (2004) are endemic to the IM West, representing a high degree of endemism. Many of the small mammal species whose status is reviewed in the report are important prey for raptors and some other special status species. In addition, the high degree of endemism is likely even greater than species-level ranges would indicate, and genetic analyses of upland and riparian small mammals may provide more examples of "cryptic" species like has now been found in endemic ground squirrels in Idaho.

Reason **[C31]** *Only one of the 19 species of small mammals for which adequate trapping data was available was found in more than 62% of potentially suitable localities. This analysis of field studies is the first comprehensive attempt to quantify presence or absence across a region. The report found that 21 of the 24 small mammal species respond negatively to the effects of livestock grazing. Eleven of 18 small mammal species responded negatively to the presence of exotic plants, with riparian mammal species exhibiting neutral responses if vegetation was thick enough.*

Geographic patterns of species richness and community stability raise concern. Despite range maps showing occurrence over broad areas, many species of small mammals now exist only as small, disconnected populations isolated from each other by unsuitable habitats." Thus, it is completely untenable to assume species' presence based simply on presence of appropriate habitat in shrubsteppe landscapes of the IM West." This demonstrates why BLM must systematically conduct non-lethal site-specific surveys for small mammals in representative habitat types, and assess habitat conditions, across the allotments.

Response to **[C31]**: It is not a revelation to BLM that virtually all wildlife distributions depicted on range maps include areas within them that may not support the species. Dobkin and Sauder are raising relevant academic questions about animal distributions here that cannot be resolved within the scope and scale of a general Rangeland Health assessment.

BLM compensates for animal distribution data limitations of this sort by assuming the species are likely present within suitable habitat and analyzing impacts on the assumption that species are present until proven otherwise. This is a practical and conservative land management approach for an agency to take given that available distribution information is often imperfect. Also see response to **[C3]**.

Reason **[C32]** *The report authors conclude: We find no reason for optimism about the prospects in the Intermountain West for any of the 61 species identified. Sagebrush distribution is highly fragmented, and much less extensive than large-scale maps suggest. Extraordinary*

fragmentation and degradation of sagebrush-steppe landscapes has been caused by livestock grazing practices, purposeful removal of sagebrush and/or seedings through prescribed fire, mechanical treatment, biological agents and herbicides, invariably done to provide forage for livestock, especially as native vegetation communities have become increasingly depleted, as well as ag-conversion, roads, mining and mining exploration fragmentation, powerline and pipeline corridors.

> Response to **[C32]**: Based on field observations made by professional BLM staff, the LCGMA assessment and Evaluation narratives describe an exceptionally large tract of land that is substantially un-fragmented and supports sagebrush steppe with relatively high ecological integrity. WWP accurately recites broad scale generalizations about the west, but then misapplies those generalizations to specific conditions found on LCGMA rangeland.

An untold number of livestock facilities (fences, spring projects, pipelines, trough systems salting sites, corrals, wells, windmills, water haul sites, etc.) have been constructed or placed on public lands – including across these allotments and surrounding lands. Roads almost inevitably grow up either as a direct result of facility construction/placement, or of continued facility use and maintenance. Reason **[C33]** *Then, roads become travel corridors for predators (Braun 1998, Federal Register 2003, Federal Register 2004, Connelly et al. 2004, Freilich et al. 2003, Connelly et al. 2004, Dobkin and Sauder 2004), and conduits for weed invasion (Gelbard and Belnap 2003). Many of these facilities have unforeseen effects, and exert influence over much larger areas than anticipated. For example, water developments may attract sage grouse predators and be "sinks" (Connelly et al. 2004).*

Ecological changes have pushed many sagebrush landscapes beyond ecological thresholds for recovery. Cumulative effects of land use and habitat degradation are moving sagebrush habitats toward ecological collapse and dysfunction (Knick et al. 2003, Dobkin and Sauder 2004).

> Response to **[C33]**: BLM has referred to these concerns in the EA so it is not new information. Knick et al. identify the greatest impacts where cheatgrass invasion has occurred. Cheatgrass is a minor component of LCGMA rangeland and BLM proposes to take actions which will limit future instances of cheatgrass expansion. Road access is very limited, which partially accounts for the low level of habitat fragmentation within LCGMA.

Reason **[C34]** *Although sage grouse have been the flagship species for this ecosystem, and publicity over concerns have focused mainly on grouse, it is not just sage grouse that are in trouble. Sage grouse have become a surrogate for numerous species of animals and plants that depend on sagebrush communities, and many of these species may also use salt desert shrub communities.*

> Response to **[C34]**: The fact that numerous species of animals and plants depend on sagebrush communities is why SEORMP and LCGMA management objectives each highlighted sagebrush steppe wildlife communities that were identified in ICBEMP science documents and other information sources. BLM management in Jordan Resource Area emphasizes sage-grouse where habitats are known to support them, but it does not focus

exclusively on greater sage-grouse, as stated in pages 57-58 of the Revised EA, Chapters 2 and 3 of the SEORMP FEIS, and Appendix F (pages F5 and F6) of the ROD.

Based on field data and published information, BLM has demonstrated LCGMA supports numerous sagebrush-dependent species and described this in the Evaluation.

Shrubland and grassland birds, representing an important component of the biodiversity of the western United States, are declining faster than any other group of species in North America (Saab and Rich 1997, Paige and Ritter 1999, USGS Great Basin Mojave-Desert Region (Brussard et al.), Dobkin and Sauder 2004). Species dependent on sagebrush ecosystems (Brewer's sparrow, Sage Sparrow, Sage Thrasher), may be important predictors of ecological collapse.

Reason **[C35]** *The heart of the most contiguous expanse of higher quality sagebrush-steppe landscape in the entire Columbia Plateau includes the LCGMA, allotment, and it is one of the few areas that still has 81 to 100 percent of the land cover in sagebrush habitat (Dobkin and Sauder 2004, Figure 1, at 6). Only the Wyoming basin has a larger area of sagebrush – and is greatly threatened and suffering fragmentation at an alarming rate due to an energy development and exploration boom. The Wyoming Basin exhibits much lower species richness for sagebrush-steppe mammals. This highlights the extraordinary importance of the allotments, and the paramount need for extremely conservative management to protect the important ecological values.*

Response to **[C35]**: BLM concurs with WWP's statement about LCGMA supporting a large contiguous expanse of sagebrush steppe and has taken steps to protect habitat values. Earlier, in comments on the first edition of the EA, WWP complained that large areas of LCGMA are devoid of adequate vegetation for wildlife. Now, in this document, WWP makes an about-face and repeats back to BLM what BLM has already stated in the Evaluation concerning LCGMA's contiguous, high quality sagebrush-steppe.

Dobkin and Sauder have, by their own admission, conducted a "broad scale analysis" as an office exercise. BLM has determined from its local field investigations in this GMA that less than 5% of LCGMA is in a grassland (fragmented habitat) status and has then taken management action specified in the Evaluation (pages 2-3) and EA to limit impacts to this area.

Reason **[C36]** *A review of field studies of small mammal response to livestock grazing (compared moderately to heavily grazed upland or riparian areas with exclosures), found overwhelmingly negative responses (decreased abundance or productivity) to the effects of livestock grazing for 12 species (Table 8): Upland: Paiute ground squirrel, Washington ground squirrel, little pocket mouse, Great Basin pocket mouse, Chisel-toothed kangaroo rat, desert woodrat, sagebrush vole, Riparian: Water shrew, Western harvest mouse, long-tailed vole, montane vole, western jumping mouse. 9 species have an extremely high likelihood for negative responses to livestock grazing (Table 8) are: Upland: Merriam's shrew, Preble's shrew, pygmy rabbit Idaho ground squirrel, Merriam's ground squirrel, Townsend's ground squirrel, Townsend's pocket gopher. Riparian: Townsend's pocket gopher. Plus, negative responses to*

presence of exotic species have been demonstrated for eight upland species, and can be inferred with high likelihood for three others.

Patterns of high mammal species richness were concentrated within the three primary shrubsteppe ecoregions. Species richness was high in much of the Great Basin. Remarkably little is known about the actual distribution or conservation status of small-mammal species – there is no standardized survey. Alarmingly, there was a high frequency in which species were missing from studies focused on suitable habitat. This should raise concern about the current actual extent of populations. It must be understood in the context of the high degree of fragmentation and altered disturbance regimes (Knick et al. 2003), the "overwhelmingly negative response to livestock grazing", and the limited dispersal capabilities of small mammals (Dobkin and Sauder 2004). "Our results support the view that many of these species now exist as small, disconnected populations isolated from each other by unsuitable habitats across which they cannot disperse". Catastrophic decline of the largest population of northern Idaho ground squirrels illustrates this. The combined effects of altered fire cycles, (loss of fire here - as this species occurred in meadows in forest), livestock grazing and exotic species introduction is the reality faced by many small mammal populations.

Many species of small mammals exist as scattered, disconnected populations. One cannot assume species presence based simply on presence of appropriate habitat in shrubsteppe landscapes of the IM West.

> Response to **[C36]**: LCGMA authorized grazing use will predominantly fall within light utilization levels (20% to 40%) and in combination with periods of rest or grazing deferment. See also response to **[C7]** about optimum habitat qualities on public land and the purpose of Rangeland Health assessments.

A pattern of high species richness is much more concentrated for small mammals, and the number of endemics may represent more habitat specificity. The authors note that very little attention is paid to conservation needs of small mammals. Conservation efforts should integrate areas of high species richness for birds and mammals.

Reason **[C37]** *Across the IM West, altered fire frequencies combined with ubiquitous grazing drives the loss of native plant community structure and composition on which birds and small mammals depend. Grazing reduces competition from native grasses, and cheatgrass and other weeds flourish, with each successive fire promoting invader expansion, resulting in self-perpetuating monocultures of exotic plant species with very short fire return intervals (Whisenant 1991, Anthony and Vitousek 1992, Billings 1994, Knick et al. 2003). Exotic plant dominated landscapes are uninhabitable for nearly all native bird and small mammal species (Dobkin and Sauder 2004). Shrub-steppe habitat has diminished greatly - at least 44% of potential habitat for Greater Sage-Grouse has disappeared (Schroeder et al 2004) - and this study did not evaluate fragmentation of the rest!*

Response to **[C37]**: In the EA, BLM acknowledged at length the sagebrush steppe losses WWP refers to and has taken steps in the proposed action to mitigate the impacts of rangeland developments and livestock grazing use.

Biome-wide, accelerated Oil and Gas development is occurring in Wyoming. This places landscape-scale fragmentation and soil disturbance on an even faster trajectory, further heightens the importance of management to conserve and enhance public lands resources in the LCGMA. Also, an astonishing number of fences and other livestock projects that serve to fragment habitats are found across the sagebrush biome (see Connelly et al. 2004), and scientific understanding of the very harmful impacts of these facilities is growing.

Sagebrush Bird Species Summaries (Dobkin and Sauder 2004)

Reason **[C38]** *There are significant declining trends for 16 of 25 upland bird species (64%) in the regions of the Intermountain West (Dobkin and Sauder 2004). Only 3 species showed a significant increasing population trend. 5 of 12 riparian species declined significantly over both the short and long term. "Birds that depend on native vegetation for their nests clearly are jeopardized by the loss or degradation of vegetation. Nearly all 25 upland species are obligate ground/shrub nesters, with 18 of the 25 species dependent on native shrubs for nesting and foraging.*

Response to **[C38]**: BLM is aware of downward population trends for a number of species as reported in Partners in Flight publications, ICBEMP science and elsewhere. As BLM stated in its response to ONDA and WWP comments on the EA, BLM has not ignored impacts to wildlife from rangeland developments and livestock grazing. BLM simply disagrees with WWP's dire characterization of the impacts likely to occur under the proposed action.

Species richness for upland birds was concentrated in the three primary shrubsteppe ecoregions, with areas of highest species richness extending across the Columbia Plateau from southeastern Oregon to easternmost Idaho, the eastern two-thirds of the Great Basin, and southwestern Wyoming Basin. There was constancy in bird species composition in upland bird communities between 1968-1983 and 1984-2001. However, the community \composition of riparian bird communities varied substantially between periods, with a decrease in species composition of riparian communities. Plus, ecologically unsuitable habitats are now embedded in matrices of suitable habitats.

All of the upland bird species, and all the riparian species (except the yellow-billed cuckoo) listed in Dobkin and Sauder (2004), Table 1 at 9 are likely to occur in the LCGMA area, likewise, nearly all of the small mammal species found in Table 2 at 10 are likely to occur in the Project area. For some species, such as loggerhead shrike, declines were especially severe in the three primary shrubsteppe ecoregions – with population losses across large geographic areas.

Geographic patterns of species richness for birds found that areas of highest upland avian species richness correspond with areas of lowest shrubsteppe fragmentation. Bird species "Entirely"

dependent on sagebrush: Greater Sage-Grouse, Sage Thrasher, Brewer' Sparrow, and Sage Sparrow. Birds "Nearly" dependent: Gray Flycatcher, Gray Vireo, Green-tailed Towhee, Black-throated Sparrow.

Reason **[C39]** *Riparian birds have distributions that extend beyond the IM West, as do riparian mammals. Given the relative rarity and ecological importance of riparian habitats within shrub-steppe landscapes, the high degree of instability in riparian bird community structure found in the report, reflects the poor condition of riparian habitats across the Great Basin, Columbia Plateau and Wyoming Basin ecoregions (Dobkin and Sauder 2004, citing Saab et al. 1995, Dobkin et al. 1998, Tewksbury et al. 2002, Krueper et al. 2003, Earnst et al. 2004) and the dewatering of riparian zones (Dobkin and Sauder 2004, citing Rood et al. 2003), causing damage to avifauna and habitats.*

> Response to **[C39]**: BLM management is expected to gradually improve riparian conditions over time.

Reason **[C40]** *Upland Species (summarized from Dobkin and Sauder (2004):*

> Response to **[C40]**: In the three paragraphs below, WWP cites a long list of concerns and biological information about birds and sagebrush habitat degradation and loss of which BLM is already aware and has discussed in the Evaluation and EA.

* Greater Sage-Grouse. The LCGMA allotment lies in part of one of the two zones of greater abundance in the ICB, and this abuts the states of Idaho and Nevada (see Dobkin and Sauder at 31). Causes of Declines: Habitat destruction, degradation and fragmentation, altered fire frequency (both lower and higher), livestock grazing converting shrubsteppe to annual monocultures are Threats, range "improvements", and West Nile virus are threats. (Note: Also, muddy cow tracks, such as at the margins of stock ponds or other livestock trampled areas may provide necessary breeding sites for mosquitoes in arid landscapes.) Plus, large numbers of livestock may provide an unnaturally large blood food supply for mosquito populations. * Ferruginous Hawk. Open areas, isolated trees, and edges of pinyon-juniper woodlands are used for hunting perches and nesting. "Prey abundance, particularly jackrabbits and ground squirrels, is correlated significantly with the number of breeding pairs in an area and with reproductive success. (Dobkin and Sauder 2004, citing Jasikoff 1982 and Deschant 2001 b) (at 36). Habitat destruction and degradation are greatest threats, and directly influence prey abundance, important to reproductive success. Ferruginous hawks can be particularly sensitive to human disturbance (at 37).
* Prairie Falcon. Open habitats with moderate grass cover and low-growing sparse shrubs. Nest-site availability and ground squirrel populations are important factors in habitat selection. Activities affecting ground squirrel abundance, include livestock grazing, frequent fires, ag conversion, poisoning. Disturbance near nest sites (cliffs) can reduce breeding success.
* Long-Billed Curlew. Livestock grazing can be negative if cows trample nests, or disturb birds and cause nest abandonment.

* Burrowing Owl. Requires low vegetation and a suitable nest burrow. BOs may expand other species burrows, but do not dig their own. Excavation by ground squirrels, marmots and badgers is important in nest burrow availability. Threats are habitat degradation and destruction, and shrub-steppe degradation by livestock or ag conversion. Pesticides can reduce populations of insect prey and fossorial mammals. Badgers, coyotes, birds of prey and vehicle collisions may also be problems.
* Gray Flycatcher. Shrub-steppe, mountain mahogany and pj. In shrubsteppe, gray flycatchers are associated with tall, dense sagebrush. Chaining or burning of sagebrush and pinyon/juniper areas is known to eliminate gray flycatchers (at 46). It is parasitized by the brown-headed cowbird. Habitat fragmentation likely increases nest parasitism and predation rates.
* Loggerhead Shrike. Shrubsteppe, open woodland, field edges, and occasionally riparian areas. Presence and abundance in shrubsteppe is positively correlated with the diversity, density and height of shrubs. Population declines in Columbia Plateau and Great Basin.
* Horned Lark. May be susceptible to trampling, and affected by invasion of annual grasses.
* Sage Thrasher. Habitat destruction, degradation and fragmentation are threats, including activities that destroy shrub cover (fire, chaining, herbicide) eliminate local populations. Although authors note that livestock grazing may increase shrubs, livestock grazing also alters shrub structure, especially that of taller sagebrush or other shrubs which are areas where sage thrashers nest.
* Green-tailed Towhee. Shrublands and disturbed coniferous zones. In shrubsteppe, its presence and abundance are positively correlated with increased shrub species diversity, shrub cover, and taller shrubs. Threats are habitat destruction and degradation – livestock grazing and frequent fire have impacted shrubs. Simplification of shrub cover results in population reduction or elimination.
* Brewer's Sparrow. Its presence is positively correlated with total shrub cover, bare ground, taller shrubs, patch size, and habitat heterogeneity – and negatively correlated with grass and salt shrub cover. Large population declines have occurred the in Columbia Plateau and Great Basin. Cowbird host. Threats are habitat destruction and degradation. Activities that destroy shrub cover (fire chaining herbicide, etc). A cowbird host. Positive (increased shrubs – see previous comments about shrub structure) and negative responses to grazing.
* Vesper Sparrow. Inhabits short, patchy herbaceous vegetation, low shrub cover bare ground, forbs. Habitat destruction and degradation – frequent fires, in conjunction with invasive grasses, heavy livestock grazing (which increases shrub cover), and poor range conditions created by livestock grazing during drought increase rates of nest abandonment and failure. Cowbird host.
* Lark Sparrow. Threats are fire and livestock grazing converting lands to annual grass monocultures are threats.
* Black-throated Sparrow. Desert shrub, shrub-steppe, open pinyon-juniper. Correlated with moderate shrub cover, tall vegetation, shrub species richness, and dead woody vegetation. Drought reduces the number breeding attempts and clutch size.
* Sage Sparrow. Particularly associated with big sagebrush, or may be found in mixed shrub communities with greater shrub cover, abundant bare ground, sparse grass cover. Shows high site fidelity. Habitat destruction, degradation and fragmentation are chief threats, and are caused by frequent fire, livestock grazing, range "improvements" (shrub treatments, exotic grass plantings) – and these promote other impacts – predation and nest parasitism.

* Savannah Sparrow. It has been assumed that Savannah Sparrow populations benefit from conversion to annual monocultures. However, converted habitats may not be equivalent to native grassland habitats and may serve as population sinks.
* Grasshopper Sparrow. Livestock grazing degrades habitats. While it benefits from natural fire, annual grass conversion resulting from fire is negative.
* Western Meadowlark. May be affected by fire.

Other summaries of species trends support Dobkin and Sauder (2004). Many species with downward trends in population size are associated primarily or exclusively with shrub-steppe or riparian habitats. In shrub-steppe, this includes northern harrier, mourning dove, horned lark, loggerhead shrike, green-tailed towhee, vesper sparrow, sage sparrow (USGS Mojave-Great Basin at 33-51). Populations up in one area, down in another: rock wren, sage thrasher, Brewer's sparrow, black-throated sparrow, western meadowlark. Population sizes of mourning dove and loggerhead shrike, whose abundances are declining widely in western North America are also declining in the Great Basin. The preponderance of downward trends in shrub-steppe indicates continuing problems with the health of this community. In pinyon-juniper with a sagebrush and bunchgrass understory, species include common nighthawk, northern flicker, gray flycatcher, mockingbird, chipping sparrow, and Scott's oriole (USGS Mojave-Great Basin at 33).
Riparian species with downward trends: killdeer, violet-green swallow, warbling vireo, yellow warbler, lazuli bunting, savannah sparrow, song sparrow, yellow-headed blackbird, Brewer's blackbird. Downward trends in riparian species – are indicative of continuing deterioration of riparian habitats of the Great Basin (USGS Mojave-Great Basin at 34).

Waterbirds. Because of tremendous past and continuing loss of wetlands, many waterbirds should be considered sensitive. Surveys of shorebirds in western North America are inadequate. Playas may Basin provide critical stopover habitat during migration for great numbers of Wilson's and red-necked phalaropes, long-billed dowitcher, American avocet, least and western sandpipers.

We Protest BLM's Failure to Adopt Conservation Strategies to Protect Lands from Exotic Species Spread and Further Degradation of Native Communities

The Nature Conservancy has developed a conservation portfolio of sites in the Great Basin that are important for long-term conservation of native biodiversity. It stresses protection of unique sites, or important relatively intact native communities, often at the landscape scale. Landscape-scale conservation is also a critical component of ICBEMP assessments (see Wisdom et al. 2000 – much discussion in accompanying ACEC Nominations). In the Great Basin, as in the LCGMA, large browsers disappeared about 12,000 years ago. The largest ungulate was the pronghorn. Jackrabbits, cottontails, and rodents may have been the largest herbivores (TNC Blueprint, Mack and Thompson 1982, Connelly et al. 2004). Microbiotic crust occurs in areas that are not, or lightly, grazed. As a result, livestock grazing and trampling impacts cause extensive, chronic and often irreversible harm to soils, vegetation and habitats of native species.

This results in an alteration of composition, function and structure of plant and native animal communities (Fleischner 2004)

Reason **[C41]** *Grazing is the most common disturbance that leads to weed invasions at these lower elevations. Halogeton invades dry sites, exacerbated by livestock grazing. These communities are increasingly threatened by the proliferation of non-native annual grasses. Historically, they did not burn. (TNC Blueprint at 2001).*

> Response to **[C41]**: Contrary to WWP's assertions, BLM assessed the presence of cheatgrass and other weeds and found them to occur in only trace amounts in LCGMA (Evaluation, pg 26 and Chapter 3, Rangeland Health Determinations, and the Revised EA). Halogeton was not observed within the GMA. Wildfire, which can be the major influence for weed invasion, is extremely rare in the GMA.

Reason **[C42]** *BLM had a unique opportunity in the LCGMA area to develop a management strategy that focuses on conservation of important sagebrush biome values. Examination of lands for ACEC designation (sagebrush biome ACEC) or livestock-free reference areas could be accomplished under the LCGMA process, but unfortunately Vale BLM has chosen to ignore the conservation importance of the lands.*

BLM's Assessments and other documents fail to adequately describe cheatgrass being a growing problem in the lower elevations areas of the allotments. Plus, BLM grossly under-estimated the level of halogeton, white top, or other weed presence in these lower elevation communities across these allotments, and intensive current surveys must be conducted as part of the assessment effort if BLM is to understand the condition and degradation of special status species habitats.

> Response to **[C42]**: Concerning ACEC's, see response to **[A1]**.
>
> BLM is pursuing an upland wildlife management strategy under the SEORMP which is briefly outlined on pages 57-58 of the Revised EA.
>
> The SEORMP strategy considers both ecological and structural condition values of rangeland for wildlife and it provides an effective mechanism for considering cumulative effects of fire and land treatments which both greatly influence wildlife habitat quality. The process is described in a BLM National Science and Technology Technical Reference (#417) that will be published by Fall 2005. BLM has shared this information with WWP in scoping meetings and provided an early version of this paper under a FOIA request for the SEORMP lawsuit. They did not comment on its content during the formulation of the SEORMP and they have not done so for LCGMA.
>
> WWP and others complain that BLM should practice landscape level management but they have yet to provide BLM with a rational definition of what that really means or a practical way to accomplish the task other than by (1) removal and avoidance of all potentially impacting activities from the public land or (2) conducting analyses at broad scales which are already available or underway by other entities such as USGS. WWP's vision of landscape level management at this point is not helpful or practical given that they do not provide specific

comments until after scoping, assessment, evaluation, and EA formulation steps in this process have been completed.

Contrary to WWP's assertions, BLM did assess and describe the presence of cheatgrass and other weeds and found them to occur in only trace amounts in LCGMA (Evaluation, pg 26 and Chapter 3, Rangeland Health Determinations, and the Revised EA). The BLM does not agree that weed densities were "grossly under-estimated", and has made upland assessment field data available to the public that document the insignificant percent cover of cheatgrass and other weeds at the 43 assessment sites. Also see responses to **[C41]** and **[C43]**.

Sagebrush semidesert under TNC's Plan is highlighted for conservation because of decline of sagebrush-obligate species. Species dependent include: sage sparrow, Brewer's sparrow, sage thrasher, sage grouse, pygmy rabbit, sagebrush vole, sagebrush lizard, pronghorn (Paige and Ritter 2000). These same very important values are found in the LCGMA area.

Reason **[C43]** *Fire regulates the density of fire-intolerant shrubs. Invasion of exotic annual grasses has increased fire frequency in stands causing a decline in abundance of sagebrush and other non-sprouting shrubs. In some areas, weed species may be invading annual grass-dominated sites. Grazing decreases tall bunchgrasses and increases rabbitbrush, forbs and non-native grasses. Grazed sagebrush usually lacks altogether, or has no good condition microbiotic crusts. Large tracts of sagebrush semidesert and sagebrush-steppe are needed to adequately protect these systems (GBCB at 90).*

Response to **[C43]**: It is again brought to the attention of WWP and ONDA that, at all 43 upland vegetation assessment sites, only trace amounts of cheat grass occurred, with no indication of noxious weeds, and microbiotic crusts were present at varying abundances. Wildfire, which can be the major influence for weed invasion, is extremely rare in the GMA. Only about 7,200 acres of native range have been disturbed by wildfire (LCGMA Evaluation, Chapter 2, Fire) and no prescribed fires have been ignited in the unit. Even in years with large numbers of fires in the District, such as 1986, 2000, and 2001, LCGMA has not sustained appreciable shrub cover loss due to fire. The GMA landscape has continuous low and big sagebrush connectivity in 95 percent of the area, and research indicates that crusts recover more quickly from disturbance under shrub canopies than in adjacent plant interspaces (Eldridge, 1996; USDI-BLM 2001, Fig. 4.9). Regarding impacts of proposed vegetative land treatments in LCGMA, in an effort to further reduce the potential of cheatgrass invasion and impacts to microbiotic crust, the BLM did not choose prescribed fire as the treatment method (see below and in the Proposed Decision, page 16). Therefore, even with the current livestock grazing disturbance occurring on an annual basis, the potential for the influence or replacement of crusts by invasive or noxious weeds on a large scale in LCGMA is remote. See also responses to **[C41]** and **[C42]**.

Reason **[C44]** *The Partners in Flight North American Landbird Conservation Plan (Rich et al. 2004) identifies a critical need for strategic approaches to landbird conservation, and describes overarching threats faced by landbirds, including: significant direct loss of major bird habitats (including loss of western riparian, pinyon-juniper and sagebrush habitats); fragmentation and degradation of remaining habitats due to intensified agricultural practices, inappropriate grazing, spread of exotic vegetation and other factors; failure to identify and properly protect or*

manage habitat used during spring migration, fall migration, and winter. Birds stressed during migration require quality habitats for food and cover; a steady, widespread increase in dispersed mortality factors. These factors collectively contribute to a high proportion of population declines and anticipated future threats.

> Response to **[C44]**: Refer to response to **[C42]**.

Birds are of growing recreational importance. Birds also contribute to the maintenance of ecosystems – from dispersing native plant seeds to consuming insect pests. Conserving habitat for birds will contribute to meeting needs of other wildlife.

Reason **[C45]** *PIF encourages planners to identify common issues or habitats among suites of high priority species. It assesses conservation vulnerability based on biological criteria. PIF Assessment Factors include: Population size, breeding distribution, non-breeding distribution, threats to breeding, threats to non-breeding, and population trend.*

> Response to **[C45]**: BLM identified a suite of relevant landbird species for LCGMA and is taking steps to moderate and avoid undue impacts. BLM does not plan to authorize inappropriate grazing.

Species of Continental Importance in LCGMA lands include: Watch List and Stewardship Species. Watch List: Greater Sage-Grouse, Swainson's Hawk, Short-eared Owl, White-throated Swift, Pinyon Jay, Brewer's Sparrow, Mountain Quail (???). Stewardship Species: Gray Flycatcher, Sage Thrasher, Black-throated Gray Warbler, Green-tailed Towhee, Black-throated Sparrow (???), Sage Sparrow, Grasshopper Sparrow (?), Yellow-headed Blackbird, Rough-legged Hawk (winter?). Rosy Finch species (winter?).

Conservation of Stewardship Species will be a step towards maintaining broader suites of species within all biomes. LCP at 31 states: "habitat loss remains the paramount factor for most species", and "habitats in danger of significant loss in the near future include western pinyon-juniper, sagebrush, and wetlands. It describes the impacts of habitat fragmentation, and the growth in dispersed recreation such as OHV use.

Sage grouse are threatened by "extensive degradation of its sagebrush habitat by overgrazing and invasive plants" (LCP at 31). Livestock grazing "has had enormous effects on native vegetation – a century of selective removal of palatable plant species, soil compaction, water developments and livestock management activities" (LCP 2004, citing Saab et al. 2004. Habitat loss and fragmentation are also occurring on migration routes and in wintering areas.

Reason **[C46]** *It promotes landscape-level natural resource planning. One example of "measurable criteria" is number of agency plans into which landbird objectives have been incorporated. This LCGMA Assessment provides just such an opportunity!*

Issues are identified that transcend biomes, including:

- *Habitat loss, degradation and fragmentation*
- *Forestry management*
- *Fire management strategies*
- *Wetland Issues*
- *Exotic or invasive species*
- *Resource extraction/energy*
- *Livestock grazing management*
- *Climate change*
- *Contaminants and pesticides*
- *Lack of information.*

Response to **[C46]**: Based on the Evaluation, BLM has set measurable limits on agency-initiated actions in LCGMA which fragment habitat, including land treatment and prescribed fire (Chapter 5, Wildlife Objective 1, pages 2-3).

There are no forest habitats within LCGMA.

Wildfire impacts will be limited to less than 10% of LCGMA over the next 20 years (Chapter 5, pages 2-3, Evaluation).

Riparian habitats are expected to improve over time through changes in seasons of livestock use.

Resource extraction and energy development are not issues in LCGMA.

Grazing impacts have been substantially mitigated through utilization and season of use limitations.

The allotments lie within the Intermountain West Avifaunal Biome, which is composed of 3 Bird Conservation Regions (BCRs). "Extensive mountain ranges and broad basins produce large elevational gradients that create a complex and variable environment - including coniferous forest, pinyon-juniper woodland, and cold semidesert shrubsteppe, and important wetland complexes. The IM West is center of distribution for many birds, and over half the Biome's SCSI have 75 percent or more of their population here. "Threats and/or declining trends face Species of Continental Importance that use coniferous forest, pinyon-juniper woodland, shrubsteppe, and riparian habitats".

Reason **[C47]** *Shrub-steppe species comprise the largest number of Species of Continental Importance in this biome.*

Response to **[C47]**: BLM wildlife habitat objectives in shrub-steppe for LCGMA deliberately addressed landbird conservation matters because of their ties to sagebrush community health and issues raised in the ICBEMP. BLM has already funded two high quality landbird surveys in Oregon (Holmes and Barton 2003; 2004) and another effort is ongoing in prescribed fire areas of the Oregon Canyon Mountains.

Conversion for ag., invasion of non-native grasses and forbs, development, sagebrush eradication and changes in fire frequenc have caused extensive loss and degradation of habitat, with subsequent population declines. Cheatgrass has invaded about half of the existing sagebrush habitat. It is the highest conservation priority in the Interior Columbia Basin (Saab and Rich 1997, Paige and Ritter 1999), and species include: Greater Sage-Grouse, Sage Sparrow, Sage Thrasher, Brewer's Sparrow, Green-tailed Towhee. Sadly, lands in the LCGMA with depleted understories and damaged soils and microbiotic crusts are at great risk for invasion of exotic annual grasses and other weedy species.

Riparian Habitats. Characteristics of riparian habitats vary widely depending on matrix and elevation, from cottonwood gallery forests to willow thickets. Nearly all riparian areas have been substantially degraded by development or alteration of many types – including de-watering, and alteration of flows, road construction, invasion of non-native species, logging, severe overgrazing, recreation.

Conservation issues include: Inappropriate livestock grazing, invasion of exotic plants (often fostered by livestock grazing impacts), change in fire intensity and frequency, management practices affecting plant community structure, and composition – especially mature communities, continued degradation of riparian habitat, conversion of sagebrush habitats, including through land management practices, water diversion, alteration of flows, spring development, and recreational OHV use.

Recommended actions: Maintain/promote growth of native grasses and forbs in shrub-steppe, prevent large scale wildfire, restore with native plants following disturbance. Maintain water quality and quantity and vegetation in embedded springs, seeps and riparian areas. Restore degraded habitats and habitats that have been converted to non-native grasslands. Protect high quality riparian habitat. Restore natural flows and flooding regimes.

Reason **[C48]** *Interfacing Communities/Natural Diversity and Inherent Complexity of Plant Communities. The pygmy rabbit illustrates the importance of understanding interfacing habitats. Pygmy rabbits dig burrows in areas of deeper soils that may be present as inclusions of big sage interfacing with larger areas of low sagebrush habitats. It is critical that BLM examine the complex interspersion of plant communities across the landscape, and conduct systematic surveys to document species occurrence, and health of habitats for such species of concern. Sagebrush communities often exist as complex mosaics with inherent natural diversity (Montana Department of Fish, Wildlife and Parks 1995, Welch and Criddle 2003).*

> Response to **[C48]**: BLM understands the importance of what WWP refers to as "interfacing habitats". Big sagebrush and low sagebrush habitat complexes were acknowledged in the Evaluation as being present and having high wildlife values for sage-grouse, pygmy rabbit, and other species. Impacts to these habitats were also described in the revised EA (page 20-21).

Native Vegetation: The ecological integrity of native plant communities is the foundation of healthy habitats for special status species, raptor prey species, and healthy watersheds and watershed processes that replenish aquifers for scarce desert springs.

Risks to Special Status and Declining Species: Baseline Data Is Needed, and We Protest the Lack of Baseline Data in the LCGMA Assessment

Reason **[C49]** *Important recent summaries, such as Connelly et al. 2004 and Dobkin and Sauder 2004, and Wisdom et al. 2000, examine species of concern and their habitat needs. BLM must conduct on-the-ground surveys for all species of conservation concern, and collect thorough and up-to-date information on the quality and quantity of habitats across these allotments and surrounding lands.*

> Response to **[C49]:** BLM identified terrestrial wildlife of management importance for LCGMA on page 34 of the Evaluation, based on known species presence and various lists of special interest wildlife that have been generated by public and private entities. In this protest, WWP often refers to the same lists and important habitat elements BLM used in the Evaluation and EA. BLM's list of LCGMA species of importance provides specific habitat context for interpreting and explaining rangeland health indicators for wildlife, including plant community composition, age class distribution, productivity, spatial distribution of habitat, and habitat connectivity (i.e. indicators listed in the Evaluation, Appendix B, page 6). Also see response to **[C7]**.

Reason **[C50]***BLM must conduct systematic baseline surveys for breeding birds (we appreciate the efforts of the Point Reyes study, but are not certain if it systematically examined conditions across all habitat types in the allotments over a range of seasons), migrants, wintering species. BLM must conduct systematic non-lethal small mammal surveys in represent habitats – in various ecological conditions – across the allotments. BLM must try to understand the impacts of depauperate vs. better condition habitats on special status species. BLM must also fully consider the dynamics in wildlife populations – such as antelope herds and sage grouse that may range across 3 states, and the high priority segments of the public place on species, such as antelope and mule deer.*

> Response to **[C50]**: See responses to **[C1]** and **[C7]**.

Reason **[C51]** *Wisdom et al. (2000) provide additional information on understanding animal species habitat needs. See Summaries for Groups 30-35, for example – two specific examples provided below. Please apply information in this document to species and habitat needs analyses in the LCGMA area. Guidance provided by Wisdom et al. 2000 includes:*

Management implications: Most of habitat cluster 5 (Owyhee Uplands ERU) and cluster 6 (northern Great Basin, Owyhee Uplands, Upper Snake ERU), with the potential risks to ecological integrity are: continued declines in herbland and shrubland habitats.

Primary issues: Permanent and continued loss of shrubsteppe due to ag conversion, brush control, cheatgrass invasion; Soil compaction and loss of micrbiotic crust; Adverse human disturbance.

Strategy: Identify and conserve large remaining areas (contiguous habitat) of shrubsteppe vegetation where ecological integrity is still relatively high, and to provide long-term habitat stability for populations and provide anchor points for restoration, corridors, and other landscape-level management. Restore grass and forb components. Restore microbiotic crusts, maintain burrows. Minimize adverse effects of human intrusion.

In support of conserving shrub-steppe, identify large areas of high ecological integrity to be managed for sustainability, on large areas of federal land. Criteria for protect and enhance include: maintaining or increasing the size of smaller patches, preventing further habitat disassociation, protecting or increasing the size and integrity of corridors, all in connection with the location of core areas. Use fire suppression and prevention to retard the spread of cheatgrass. Restore cheatgrass monocultures. Restore native vegetation. Design livestock grazing to promote abundance of forbs and grasses in understory, encourage development of microbiotic crusts. Allow burrows to persist or expand. Unfortunately, BLM's Proposed Action fails to adopt integrated and certain management necessary to protect and conserve existing habitats, let alone restore degraded areas. Instead, it shifts livestock impacts, constructs/re-constructs an array of harmful new livestock facilities that will extend and shift use thus further degrading and fragmenting some critically important sagebrush habitats.

Response to **[C51]**: The BLM used the best available information in the LCGMA assessment and Evaluation writing process, which included Wisdom et al. (2000) and their ICBEMP work.

BLM addressed habitat issues identified in ICBEMP wildlife science documents (including Wisdom et al. 2000) by: (1) validating the presence of Terrestrial Source Habitat; (2) identifying species of wildlife within LCGMA that have declined historically within the Interior Columbia basin; and (3) taking appropriate management actions to conserve those remaining habitat values. Wisdom speaks of "conserving" habitat values, not completely eliminating all potential adverse impacts as WWP suggests. BLM disagrees with WWP's dire predictions of ecological collapse following implementation of the Proposed Action. See also responses to public comments in the Revised EA for LCGMA.

WWP refers to well-founded concerns about the expansion of cheatgrass. They have proposed an alternative for the EA that specified the agency should re-seed non-native rangeland over thousands of acres that currently support little or no cheatgrass (specifically Starvation, Rawhide, and Pole Creek seedings). WWP's proposal to restore these crested wheatgrass seedings would require surface disturbance from rangeland drills far beyond what BLM envisions under the Proposed Action and would likely make thousands of acres of wildlife habitat vulnerable to the possibility of weed or invasive plant invasion. This would likely occur because crested wheatgrass seedings in LCGMA were completed long before cheatgrass was a widespread problem as it is today. It is reasonable to conclude that the risks of large-scale restoration actions at this point, when cheatgrass seed source are nearby, are not worth the risk that would be taken.

WWP is inconsistent in what they demand. They want to avoid cheatgrass expansion but at the same time they propose surface disturbing actions which are likely to make invasive plant occurrence worse. They seek to conserve wildlife habitat for sagebrush dependent species, but ignore sagebrush habitat values in seedings and suggest treatments that will further fragment Wyoming big sagebrush habitat conditions.

We Protest the Lack of Basic BLM Range Monitoring and Vegetation Data

Reason **[C52]** *At present, BLM has very little current information on ecological conditions and the health of native plant communities across the landscape of these and surrounding allotments. When BLM conducted its narrow FRH assessments and allotment evaluation, it never re-visited the sites where ESI data had been collected in order to be able to systematically compare change in vegetation communities and composition over time. Key Area sites are typically located in only the most accessible areas, and are clustered in particular areas of the allotments, leaving vast land areas with no monitoring information at all collected. BLM also failed to collect necessary data on degradation caused by livestock facilities, vegetation treatments, and management activities. Current, comprehensive data on condition of soils vegetation, and habitats must be systematically collected across the allotments.*

Response to **[C52]:** As stated in **[C24]**, BLM has no ESI data for lands contained in the LCGMA. BLM thoroughly covered the landscape of LCGMA while conducting rangeland health assessments. Vegetation information was collected at all of the upland assessment sites, which are shown in Map 5 of the Evaluation, and at all trend study plot locations. BLM used these data along with all other available information to gain an understanding of the condition of lands within LCGMA. BLM does not collect utilization data in LCGMA only at "key areas" as WWP has claimed. BLM does not feel that there are vast areas that lack monitoring information which are different from the sites where upland assessments were conducted and trend information is collected. The upland assessment sites were chosen because they were representative of much larger areas of pastures in LCGMA.

BLM collected information on livestock facilities as part of the LCGMA assessments, and project inspections were completed for most of the rangeland improvement projects located in LCGMA. The Evaluation and Revised EA detailed and explained which projects needed improvement/reconstruction or removal.

Reason **[C53]** *Plus, BLM can not ignore evidence that its limited data does show - i.e. only a small fraction of larger size grasses present are present in most sites that should be dominated by these species. Thus, "production" is greatly less than that of good or better condition sites, and this is typical of many sites. BLM must also study the impacts of developments, developments, vegetation treatments, and livestock management practices to site depletion and alteration of species structure and composition.*

Response to **[C53]:** See responses to **[C25]**, **[C26]** and **[C52]**

Reason **[C54]** *As part of this process, BLM must revisit its limited monitoring sites, and must also establish a series of new ESI and monitoring sites across the allotments, in all vegetation types, and that represent levels of livestock use that occurs across these lands.*

> Response to **[C54]**: See responses to **[C24]** and **[C52].**

We Protest the Failure to Fully Assess Harms of BLM Livestock Projects That Pose Grave Dangers to Native Species

BLM's analysis for these lands involves large-scale construction and re-construction of facilities, and even more vegetation treatment on top of the large-scale treatments of the Vale Project. All of these activities will result in extensive new fragmentation (in some most important Wyoming big sagebrush and other habitats in the Interior Columbia Basin). All of these proposals have serious risks for the perpetuation of native species – and pose great threats of escalated weed invasion and permanent loss of plants, animals and biodiversity. Plus, BLM on nearby allotments in Nevada proposes large-scale livestock project development (such as the Owyhee allotment) that may harm habitats for wildlife populations shared between Nevada, Oregon and Idaho.

Since BLM proposes new treatments and facilities and and further fragmentation of habitats in the LCGMA, it must conduct a comprehensive analysis of pre-existing projects, the condition of lands they have impacted, and resultant disturbance across the landscape of these allotments and others in this regions. Reason **[C55]** *BLM has not examined the degree of fragmentation that already exists, as well as the very significant ecological problems that have arisen in the wake of many treatments.*

> Response to **[C55]**: BLM addressed habitat fragmentation from land treatments and fires at great length in the original and Revised EAs, and also crafted wildlife objectives in Chapter 5 of the Evaluation, to assure that future fragmentation would remain at low levels. Refer to Revised EA, bottom half of page 11, which discusses the uncertainty of knowing when the combined impacts of management have reached an impact threshold that is unacceptable.

We Protest the Failure to Conduct Livestock Grazing Suitability, Capability or Carrying Capacity Analyses

Reason **[C56]** *BLM must conduct current livestock grazing suitability, carrying capacity and capability analyses. BLM is aware that livestock use areas and stocking rates are based in large part on old adjudication processes – where AUMs claimed and then assigned in the adjudication process were often greatly inflated by ranchers. These "adjudicated" AUMs were not based on the ability of the land to sustain such high numbers of livestock and levels of use. Valid assessments of carrying capacity based on current resource conditions have never been conducted. Continuing grazing at levels above sustainable levels has resulted in the widespread degradation and loss of larger-statured native bunchgrasses and forbs, loss of microbiotic crusts, cheatgrass invasion and spread, etc.*

Response to **[C56]:** See responses to **[B25]** and **[B26]**.

Reason **[C57]** *In these analyses, BLM must examine:*
Slope, distance to natural water, rockiness and how rock fields, rimrocks, canyons or other features inhibit livestock movement and use, and location of "forage" across the allotments in relation to land areas actually grazable or usable by livestock on a sustained yield basis. Many lands have been so depleted that it takes dozens of acres to support an AUM – so the costs (including in weight gain/loss of livestock) are often so great that grazing is a resoundingly losing proposition, areas may be inaccessible or little used due to drought, rocks, summer desiccation, etc. BLM must also conduct assessments that examine the risks of continued weed invasions and irreversible conversions of vegetation communities under continued grazing disturbance – such areas can NOT be considered suitable or capable, as they will cross ecological thresholds from which recovery is not possible. BLM maps inaccurately reflect the extent of current vegetation communities and their health – even failing to map past failed vegetation treatments and other projects that are supposed to have been the basis for stocking rates here. Where are areas of rimrocks and canyons, talus or rocky slopes, fields of rocks that hinder livestock movement across of many of the low sagebrush areas? Where are these features in relation to reliable water sources, fences, etc.? Where are the communities that are at risk to cheatgrass dominance of understories under continued grazing disturbance?

Response to **[C57]:** See responses to **[B25]** and **[B26]**.

WWP's claims that rangelands in LCGMA are so depleted that grazing is a "resoundingly losing proposition" are unfounded. LCGMA is an arid rangeland that, based on vegetative trend, actual use, and utilization data, is appropriately stocked to ensure healthy upland conditions. These trend, actual use, and utilization data show that at the existing authorization levels, which are very similar to those in the preferred alternative, vegetative trend is static or upward for most pastures within LCGMA.

WWP's concern about risk of weed invasions is unwarranted, and has been discussed in the Revised EA at page 75. See also responses to **[C41], [C42], [C43],** and **[C63].**

BLM has also failed to identify areas where grazing may adversely affect the vegetation, soils or other elements necessary for special status species, watershed protection, important recreational uses, important cultural sites or other important elements/attributes of the public lands. Grazing directly affects plant and aquatic communities in interrelated ways by: plant defoliation, nutrient redistribution, and mechanical impact to soil and plant material through trampling. Grazing and associated activities and infrastructure directly alters/affects the amount of vegetation present at different times of the year, the degree of soil compaction, the amount of ground cover, ungulate forage availability, the effectiveness of terrestrial habitat, the level of reproductive success of terrestrial and aquatic species,

Reason **[C58]** Grazing indirectly alters/affects composition of herbaceous and shrub vegetation, the degree of shrub canopy closure, vegetative age class patterns, plant productivity, individual

plant vigor, surface soil erosion rates, water quality, soil productivity, aquatic and terrestrial habitat effectiveness, fire regimes, susceptibility to exotic plant invasions, shrub regeneration, and other factors. BLM's flawed FRH process (non-systematic, few sites in diverse areas, sites do not adequately represent many conditions found on the allotments, occurred in 2001 and does not reflect drought impacts) has not adequately examined health and sustainability of resource values on the LCGMA lands.

Response to **[C58]:** See responses to **[B25]**, **[B26]**, **[C26]** and **[C52].**

We Protest the Lack of Detailed Study of Site Conditions, and Lack of Broader Ecoregion Analysis

Reason **[C59]** *Assessments of the quality of various sagebrush and other important habitats in the allotments are necessary because: habitats and populations of species continue to decline across vast areas; there are many sagebrush species of concern; threats to sagebrush are regional in scale; regional knowledge facilitates development of consistent, efficient and credible management strategies for a comprehensive set of species. Federal land managers have legal responsibilities for effective management of habitats for sagebrush-associated species of conservation concern.*

BLM's maps and limited studies do not reflect the health of complex communities across these lands. For example, BLM examines alternatives (including the Proposed Action – see Map 16) that would slice the Tent Creek area with new fencing that may shift and concentrate use, yet has only a few or even just a single FRH assessment site in portions of this vast area, and has never re-visited ESI sites to determine negative changes caused by stocking rates and other livestock practices that are perpetuated under the Proposed Action. See Map 5, Upland Assessment sites. Paucity of assessment sites is pronounced on Lower Louse Canyon, Upper Louse Canyon, South Tent Creek, Tristate, North Tent Creek, North Stoney Corral, all of which are critical sagebrush habitats for a an array of declining species. Many of these areas also contain important cultural sites subject to damage and harm from livestock grazing and trampling caused erosion, artifact displacement, compaction and breakage, site stratigraphy alteration, etc. Necessary site-specific analysis has not occurred.

In addition to much-expanded site-specific analysis, ecoregion and spatial analysis should be conducted, including: Ecoregion and spatial extent, identify species of conservation concern, delineate ranges, estimate habitat requirements, identify regional Threats and Effects, estimate and map the Risks posed by each threat, Calculate Species-Habitat effects from all risks and other steps. Other Analyses include: Fragmentation, connectivity and patch size analyses, Consideration of non-vegetative factors affecting species of concern, and change detection studies. Regional knowledge provides essential context for land use planning.

Response to **[C59]**: There is no requirement for BLM to conduct a regional assessment as WWP suggests. BLM examines and considers resource information described at broad scales for regional context, such as the ICBEMP or other data sources. However, the Rangeland Health assessment work completed for LCGMA is conducted under the direction of the SEORMP RMP

(i.e. an approved local land use plan covered by an EIS) which is intended to address mid and fine scale information including Resource Areas, Geographic Management Areas, grazing allotments, and grazing allotment pastures. See also response to **[C7]**.

BLM must undertake a "regional" analysis for these allotments, as they each are large enough to be considered a region. The SEORMP is grossly inadequate in providing such analysis. It fails to provide information/conduct necessary analyses at the appropriate scale, and fails to present necessary information to the public, and it does not integrate necessary information to understand scale and extent of Threats (such as livestock grazing, cheatgrass presence in understory or zones of complete cheatgrass domination, livestock facility fragmentation, etc.) and other habitat degradation or fragmentation effects – especially for mammals, reptiles and many migratory birds. It also completely fails to describe or map attributes necessary to understand the quality of habitats that do exist. For example, there is no mapping or other information that shows sagebrush habitats dominated by cheatgrass; no mapping or other information to show where large understory grasses have been largely eliminated or weakened, and then replaced by small Poas, or squirreltail, etc.

Reason **[C60]** *In other words, BLM should have taken the information in the SEORMP as a coarse and incomplete starting point and augmented the limited SEORMP info, and worked to collect much more on-the-ground data needed to assess, map and identify the extent and severity of Threats and Habitat Conditions/Fragmentation, Sage Grouse, special status species and other important values across these allotments and then examined the values of these allotments in a broader landscape setting.*

Response to **[C60]**: BLM showed the best available ecological condition information on Map 6 of the Evaluation. It indicates that ecological condition of a high proportion of LCGMA ranges from mid-seral to Potential Natural Community, based on the best current information. The predominant ecological conditions within sagebrush steppe of LCGMA are those that exhibit low incidence of invasive plants such as cheatgrass and relatively high ecological integrity and resilience to disturbance from impacts such as grazing.

BLM described the wildlife habitat values in the LCGMA Evaluation and did contrast them with adjoining habitats in other GMA's.

WWP's demand for vegetation data quality at the next scale below the SEORMP will not be attainable even when the agency eventually does acquire Ecological Site Inventory data (which is the highest quality rangeland vegetation information BLM can obtain). This is the case because ESI data is mid-scale resource information which frequently describes nested soil/plant inclusions within predominant soil types without reference as to where those inclusions actually lie on the landscape.

ESI data acquisition is also a very time consuming and laborious task which BLM is not likely to further refine for the purpose of a Range Health assessment; which is the step that would need to be taken to answer WWP questions about habitat patches, distributions of bluebunch wheatgrass understories versus squirretail understories, and animal populations. BLM expects to complete about 300,000 acres per year of ESI data acquisition when the effort begins.

To repeat what has been stated in response to **[C7]**, the level of information being demanded by WWP can only be attained within the realm of scientific research and is not within the scope of an assessment.

Expanded Threats to Sagebrush and Other Shrub-Dependent Species and Habitats in the LCGMA Are Associated with the Proposed Decision that must be Assessed in an EIS. We Protest BLM's Failure to Prepare an EIS to do this.

Reason **[C61]** *BLM must assess the following threats to special status species and other important wildlife:*

Wells and windmills
Pipelines
Troughs
Pipelines
Roads (often linked to livestock facilities)
Salting Sites
Weed Infestations
Fences
Aquifer or spring depletion

Cheatgrass-dominated understories
Cheatgrass, few shrubs

Fire and altered fire cycles

Altered understory species composition
Altered understory species structure
Altered overstory species composition
Altered overstory species structure (see, for example, Katzner and Parker 1997, and Federal Register 68 (43): 10389-10409) describing impacts of livestock-altered or thinned sagebrush to pygmy rabbit)

Vegetation Treatments (seedings, railings, herbicidings, mechanical such as mowing) lacking key habitat components

Grazing season/disturbance conflicts with nesting, birthing, wintering or other critical period in species life cycle

Grazing use levels fail to provide necessary habitat components (cover or food) based on nest available science
Livestock structural alteration of shrubs

Unregulated motorized use
Road densities

Often overlooked threats from livestock facilities and structures include:

- *Physical harm to species - obstacles such as fences that can cause injury or mortality*
- *Structures cause species avoidance of areas, i.e. sage grouse avoid vertical structures*
- *Providing elevated predator perches and nest predator perches (in the case of songbirds – brood parasite perches)*
- *Attract predators and act as sinks*
- *Attract brood parasites*

All of these impacts may act directly, indirectly, cumulatively or synergistically with the effects livestock degradation associated with lands over broad areas surrounding these facilities may have to vegetation, soils and other habitat components. The end result is degradation and fragmentation of habitats for important and special status species.

> Response to **[C61]**: In the EA, BLM addressed the "threats" and impacts that WWP lists above, including water sources available to livestock which includes wells, windmills, troughs, reservoirs, and pipelines. BLM addressed impacts from roads, salting sites, fences, cheatgrass-dominated understories and the structural characteristics of plant communities relative to wildlife including how intense livestock grazing adversely impacts shrub structure. BLM also addressed the impacts of land treatments in depth.

Reason **[C62]** *The impacts of grazing during sensitive periods of the year for native wildlife must be assessed. The LCGMA Proposed Action shifts new and more intense livestock use onto important habitats during critical periods of the year for native wildlife. For example, inundating sage grouse nesting or brood rearing habitats with large numbers of cattle during nesting season may cause: Removal of cover necessary to protect nesting birds and to hide and provide essential insect food for chicks; cause flushing of birds from nests – thus revealing nests to predators; cause separation of broods and increased vulnerability to predation; strip essential cover to hide hens and nests and conceal chicks from aerial vision-oriented predators and screen scent from ground-based predators.*

> Response to **[C62]**: See response to **[C22]**.

Reason **[C63]** ***We Protest the Failure to Describe and Asssess Cheatgrass and Other Weed Presence and Risk of Further Invasion or Dominance Across the Allotments***

BLM must study the extent of cheatgrass in understories, and areas already dominated by cheatgrass. BLM must assess the risk of cheatgrass invasion of understories with continued or extended livestock use or disturbance under the Proposed Decision.

BLM cannot gloss over the role of ongoing livestock grazing in continuing disturbance that spreads cheatgrass, retarding recovery and weakening of native vegetation in plant communities that still have a significant component of native species present, etc.

BLM must assess how the presence of cheatgrass may affect special status species. For example, how do cheatgrass-dominated understories and interspaces affect reptile species occurrence and abundance - (lizards may be prey species for small mammals)? How does cheatgrass affect the pygmy rabbit?

How does cheatgrass pave the way for other weed invasions?

> Response to **[C63]**: Contrary to WWP's assertions, BLM did assess and describe the presence of cheatgrass and other weeds and found them in only trace amounts in LCGMA (Evaluation, pg 26 and Chapter 3, Rangeland Health Determinations, and the Revised EA). See responses to **[C41], [C42],** and **[C43]**.

Altered Composition and Structure/Lost Productivity

Reason **[C64]***Over large areas of the allotments, larger sized native bunchgrasses and forbs have been eliminated, or significantly weakened. Only smaller stature native grasses and weeds remain.*

> Response to **[C64]:** See response to **[C25]**.

Reason **[C65]** *Appropriate stocking levels for any areas grazed must be based on the amount of forage present on a sustainable level, and Risk of exotic species invasions must be minimized. In addition, with extensive depletion over large areas, BLM must assess the diminishing returns – and increased ecological damage done by livestock having to roam over dozens of acres to sustain themselves/harvest an AUM. This leads to more trampling impacts, more weeds, etc. BLM must identify areas where grazing is unsustainable, or where it will cause harm to still-intact communities.*

> Response to **[C65]:** See responses to **[B25], [B26]**, **[C25]** and **[C57].**

Reason **[C66]** *Grazing systems, grazing intensity and season of use: Financial returns from livestock production, trend in ecological condition, forage production, watershed status and soil stability are all closely associated with grazing intensity (Holechek et al. 1998). Short-term rest or deferment can not overcome periodic heavy use.*

> Response to **[C66]** BLM's preferred alternative for LCGMA does not propose any heavy use of rangeland vegetation. As detailed in the Evaluation at Chapter 6, page 17, maximum allowable utilization limits for native pastures will be 40 %, which is classified as "light" use, and 60 % for rangeland seedings, which is classified as "moderate" use. Native pastures that are managed as a

rest/rotation grazing system and that have no riparian concerns will have maximum allowable utilization limits of 50%, as described in the Revised EA at page 40 and 78.

By adhering to the maximum allowable utilization limits for pastures within LCGMA, rangeland vegetation will be maintained or improved. Utilization levels will stay within these maximum allowable utilization limits, because they will be terms and conditions of the new permit and are incorporated into the final decisions. Upland vegetative trend within LCGMA is static or upward for almost all pastures under the existing authorization, and maximum allowable utilization limits will be lower than those currently authorized. Therefore, upland conditions will not decline as a result of vegetation utilization by livestock. The rangeland projects which will be built and the grazing system to be implemented allow for riparian areas to improve and move toward meeting failed standards.

The conflicts with wildlife habitat needs, including food, cover, nutritional composition, space, lack of disturbance and other factors, must be studied.

Reason **[C67]** *Plant Communities - Dispersion across the Landscape: BLM must inventory and assess (including using accurate mapping) the full range and diversity of native plant communities that exist across the landscape. BLM must systematically assess the condition of these communities, including soil stability, erosion, presence of microbiotic crusts, possible loss of soil horizons, susceptibility to wind and water erosion, and their ecological integrity.*

Response to **[C67]:** Condition of native plant communities, "including soil stability, erosion, presence of microbiotic crusts, possible loss of soil horizons, susceptibility to wind and water erosion, and their ecological integrity" were observed and documented for 43 assessment sites within LCGMA. Also, see response to **[C52]**.

We Protest the Lack of a Suitable Range of Alternatives for Management of these Very Significant Wild Lands

Instead of structuring this process to develop a range of alternatives centered primarily around the needs of livestock and expanded development, BLM must consider livestock grazing as only one of many competing uses on these fragile and much-abused arid lands, and develop suitable alternatives that address the array of important values on these public lands. Reason **[C68]** *BLM's RMP requires that BLM act to protect habitats for special status species, and BLM must also follow its own policies for special status species. All alternatives must do this. Regrettably, BLM's flawed Proposed Action woefully fails to comply with the RMP and BLM's own policy for special status species.*

Response to **[C68]**: BLM considered an array of alternatives that would be expected to have a wide range of impacts to special status wildlife of management importance in LCGMA ranging from very high (Alternative 1) to very low (Alternatives 4, 5 and 6). BLM disagrees with WWP's characterization that the Proposed Action is contrary to OR/WA BLM's special status species policy and has described why this is so in the Revised EA, Response to Public Comments.

WWP did not suggest a sagebrush biome ACEC proposal during LCGMA scoping or any other phase of this process until now.

Thus, this can not be considered a legitimate alternative. Elements of the Proposed Action will cause irreparable harm to special status species habitats, and pose grave threats to native biota. New alternatives must be developed that include management for the very significant sagebrush values of the LCGMA lands (may include Sagebrush Biome ACEC, reference areas, etc.) , and that consider a range of stocking rate reductions. These must include the certainty of measurable standards of livestock use on upland and riparian habitats as triggers for removal from grazed pastures. Uses should not be shifted or extended into currently less-used lands, as these are refugia for native species, many of which are undergoing accelerated habitat fragmentation across the West. All alternatives must be based on current suitability, productivity and other studies.

We Protest the Lack of Information on Predator Control Impacts

Reason **[C69]** *Current and anticipated predator control activities associated with livestock grazing activities on these allotments, and their impacts to native biota, must be assessed. Removal of predators may have serious impacts to important special status species or their prey species. In addition, non-target species – such as raptors – may be caught in traps. Removal of badgers may affect burrow availability for the burrowing owl. Healthy native predator populations may also help provide food for scavengers like the bald eagle.*

Response to **[C69]**: No predator control activity is conducted by Animal and Plant Health Inspection Service (APHIS) within LCGMA and it is not true, as WWP asserts, that BLM must assess removal of predators in LCGMA.

As stated on page 97, Chapter 1, SEORMP FEIS, "the roles and responsibilities of BLM and USDA-APHIS are specified under a national MOU between BLM and USDA-APHIS which was signed on March 21, 1995 According to this memorandum, USDA-APHIS has the responsibility for environmental analysis documents associated with their control actions on public land and BLM identifies human safety areas or other resource management concerns where actions are proposed."

In addition, the subject of predator control on public land has already been analyzed in a USDA-APHIS Environmental Assessment (tiered to their National Environmental Impact Statement) entitled *Wildlife Damage Management in the John Day ADC District in Eastern Oregon* (Decision and Finding of No Significant Impact dated July 12, 1996).

We Protest the Lack of Data and Analysis on Drought Impacts

Reason **[C70]** *All impacts of livestock grazing during the recent drought and under future conditions must be assessed. How does drought affect productivity of vegetation? What is sustainable stocking rate during drought conditions? What are the additive, synergistic and*

cumulative impacts of grazing depletion and drought on loss of plant vigor, weakening, or death? The FRH assessments were conducted prior to the last several years of drought.

How much are plants of good vs. poor vigor affects by drought? What utilization levels are appropriate on drought-stressed vegetation? What stocking rates are necessary to prevent further depletion of native vegetation or cheatgrass or other weed invasions during drought?

> Response to **[C70]:** BLM does not do long-term planning based on drought cycles or drought conditions. To have an honest representation of the condition and capability of public lands, BLM collects actual use, utilization and vegetative trend data and bases the direction of long-term planning on this information. The FRH assessments are conducted at a specific time to determine the condition of resources at that given time. From the FRH assessments BLM will determine if there is a need for improvement in areas of the greater landscape.
>
> Actual use and utilization data, when looked at over the long term, give BLM adequate information to know the capabilities of the land based on what use has been authorized in the past. BLM can compare AUMs used to the utilization level to determine the appropriate stocking level for rangelands based on the most recent information. This was completed for public lands within LCGMA.
>
> Drought conditions relating to permitted use will be dealt with through annual use authorizations and, therefore, is not the concern of the EA process or these decisions. Certainly, vegetative production could be reduced when drought conditions persist, but vegetative health will be maintained by complying with the maximum allowable utilization limits that will be terms and conditions of the new LCGMA term grazing permits.
>
> In addition, the terms and conditions state that "upon reaching the maximum allowable utilization limit, livestock would be moved to the next pasture identified in the pasture rotation. If the maximum allowable utilization limit is reached in the last pasture scheduled for use prior to the end of the identified use period, livestock would be removed from BLM public lands within the allotment. This annual monitoring requirement may result in shortened use periods for some or all pastures in years of decreased forage production, such as drought." See also response to **[B27]**.

We Protest the Lack of Information on Special Status Species Habitats and Needs – Example: Raptors and Prey their Prey Species

Reason **[C71]** *The inextricable link between predators and healthy populations of prey species demonstrates why BLM can not put on blinders and ignore detailed study of special status species needs. Examples:*

Link between golden eagle, jackrabbits and healthy sagebrush and salt desert habitats;
Link between prairie falcons and ground squirrels/small mammals prey and healthy sagebrush communities.

Response to **[C71]**: BLM discussed raptor and prey base issues in the EA in relation to land treatments and habitats that support species including black-tailed jackrabbits (see Revised EA at page 158-159). This type of resource issue is precisely the reason why the SEORMP demands that the agency consider impacts at multiple scales on an ongoing basis so that cumulative impacts of land treatment and wildfire do not reach levels that literally threaten predator/prey relationships over very large areas. This is the reason for setting disturbance thresholds on page 58 of the Revised EA.

Ironically, the high sagebrush canopy cover and weak understory habitats WWP complains about are also some of the highest jackrabbit production areas in Malheur County generally, and within LCGMA specifically. The discussion provided here explains why BLM has taken action in LCGMA to avoid treatment of all high density sagebrush habitats.

A full study of LCGMA predator and prey is beyond the scope of this assessment. See response to **[C7]**.

Extensive studies of abundance, home range sizes, food habits, nesting distribution, and reproduction of raptors have been conducted in the SRBOPA, and this has resulted in significant concerns about extensive losses of native habitat due to wildfire, and livestock degradation. See BLM/IDARNG's "Effects of Military Training and Fire in the Snake River Birds of Prey National Conservation Area".

BLM must closely examine the woeful management failures of BLM in the Snake River Birds of Prey National Conservation Area in Boise to understand the consequences of continuing to impose unsustainable stocking rates and harmful practices and facility placement on these allotments. The 1995 USDI BLM/IDANG report details the ongoing destruction of habitat caused by fire, grazing and other human activity (including military training). The loss of sagebrush in the SRBOPA is clear to even the most casual observer driving through the area. A proliferation of exotic species – cheatgrass, medusahead, bur buttercup, and now white top, rush skeletonweed, and other noxious weeds - have occurred in the wake of the excessive livestock seasons of use and numbers that have been authorized here in the past. The grazing levels in the SRBOPA (high allowable utilization and many harmful grazing practices similar to Vale BLM), construction of new livestock projects or providing water in arid uplands through facilities and water hauling – are quite similar to those regrettably authorized put by BLM in its Decisions for the allotments.

Over the years since the BOP has designated, we have watched as BLM has continued to allow grazing during periods of the year that are known to be harmful to native bunchgrasses and forbs, to allow use at high levels, including during drought years, and generally continue management in a manner biased towards the livestock industry. This is the exact strategy under Vale BLM's LCGMA Decisions. The GMA process provides BLM with the site-specific opportunity to change courses, and act to protect special status species and their habitats. Otherwise, if BLM continues on the same path as the Proposed Action, the ecological disaster that is unfolding in the SRBOPA will engulf the LCGMA lands.

We Protest the Failure to Provide for Necessary Herbaceous Cover and Other Habitat Components to Benefit Sage Grouse And Other Special Status Species

Sage grouse depend on a variety of shrub-steppe habitats, and populations may move over large areas of land in the course of a year. Overhead cover of sagebrush and tall residual native grass cover are critical to successful sage grouse nesting (DeLong et al. 1995; Connelly et al. 2000; Hockett 2003; 69 Federal Register (77) 21489; Connelly et al. 2004). The sage grouse is reliant on sage-steppe communities, and its populations have plummeted westwide. Excessive livestock grazing strips required nesting cover that screens nests of ground- and shrub-nesting birds from ground and aerial predators, and alters long-term diversity of native forbs that produce insects essential to the diet of sage grouse chicks. Sage grouse eat only sagebrush in winter, and require intact stands for winter survival. Physical breakage of sagebrush and nipping by livestock also alter and decrease sagebrush cover essential for sage grouse and other sagebrush species.

The "Guidelines to Manage Sage Grouse Populations and their Habitats" (Connelly et al. 2000), have been adopted by the Western Association of Fish and Wildlife Agencies (WAFWA) guidelines, and present well-established information on essential habitat components and management based on sage grouse needs. The WAFWA guidelines are now buttressed by the recent WAFWA Conservation Assessment of Greater Sage-Grouse and Sagebrush Habitats (Connelly et al. 2004). A link to this voluminous CA document is found at the NDOW Website: www.ndow.org/wild/sg/resources/assessment.shtm .

The WAFWA Guidelines and the recent WAFWA Conservation Assessment (Connelly et al. 2004) underscore the following points with respect to sage grouse biological and habitat needs:

- The great importance of herbaceous cover in nesting habitats (WAFWA at 968; CA at 4-4 to 4-8). Grass height and cover are important to nest success. Herbaceous cover provides scent, visual and physical barriers to predators. (WAFWA at 971; CA at 4-4 to 4-8);
- Successful sage grouse nesting occurs under larger bushes. Nesting habitat has greater canopy cover, taller live and residual grasses, more live and residual grass cover, and less bare ground (WAFWA at 970-971; CA at 4-4 to 4-8);
- Successful nests occur in stands with greater canopy cover (WAFWA at 971; CA at 4-4 to 4-8);
- Early brood rearing habitats should have greater than 15% canopy cover of grasses and forbs. After chicks hatch, these grasses and forbs produce insects for chicks to eat and canopy cover to screen them from predators. Later, forbs are eaten by maturing chicks. Forbs are also important in providing adequate pre-laying nutrients to hens (WAFWA at 971; CA at 4-8 to 4-9);
- As upland vegetation desiccates, hens with broods seek out late brood rearing habitats comprised of areas with succulent green forb vegetation, such as wet meadows and riparian areas (WAFWA at 971; CA at 4-9 to 4-11);
- Winter habitats have relatively dense sagebrush canopy cover, with sagebrush exposed above the snow (WAFWA at 972; CA at 4-14).

105. Habitat protection management actions for sage grouse are summarized in the WAFWA Guidelines, and include:

- Manage breeding habitats to support 15-25% canopy cover of sagebrush, 18 cm. or greater perennial herbaceous cover height (grasses and forbs) (WAFWA at 977);
- In late summer brood rearing habitats, "avoid land use practices that reduce soil moisture effectiveness, increase erosion, cause invasion of exotic plants, and reduce abundance and diversity of forbs" (WAFWA at 980);
- "Avoid developing springs for livestock water." If this must occur, "design project to maintain free water and wet meadows at the spring," as "capturing water from springs using pipelines and troughs may adversely affect wet meadows used by grouse for foraging" (WAFWA at 980).

In addition, US Fish and Wildlife Service (69 Federal Register (77) at 21491) describes studies showing that losses of hens and nests are related to herbaceous cover surrounding nests. "Enhancing Sage Grouse Habitat, a Nevada Landowner's Guide" (Northwest Nevada Sage Grouse Working Group) also cites studies showing that sage grouse nests were least preyed upon when a residual cover of 7 inches or more of herbaceous vegetation was present.

Reason **[C72]** *Thus, there is strong scientific support for application of grazing use standards that provide for 7-9 inches of residual stubble height left uneaten on native grasses. Unfortunately, the livestock utilization levels and stocking rates now being applied in the Vale lands do not adhere to these requirements, and will not provide for necessary residual stubble heights and cover for sage grouse nesting, even under normal circumstances – let alone under drought, or weakened or low vigor conditions.*

Response to **[C72]**: See response to **[D22]**.

Reason **[C73]** *Please note, especially, there is no rationale provided for the basis of stocking rates within any existing or proposed new pastures. That Vale BLM's measures will be inadequate to provide sufficient cover for sage grouse is illustrated in other BLM documents, such as a recent Environmental Assessment from the BLM's Jarbidge Field Office (BLM Jarbidge EA, Ch. IV, pg. 88-89). The public lands of the BLM's Jarbidge Field Office extend into northern Elko County, Nevada, and are sagebrush-steppe communities, with species of native bunchgrasses that are the same as the allotments here.*

Response to **[C73]**: Vale District BLM does not concur that its land management actions or resource conditions are directly comparable to or illustrative of other BLM jurisdictions.

Reason **[C74]** *BLM has found that with 40% utilization levels, bluebunch wheatgrass is grazed to 5.5 inches, Idaho fescue is grazed to 2.3 inches, Thurber's needlegrass is grazed to 4.2 inches, and bottlebrush squirreltail is grazed to 2.3 inches. All of these residual stubble heights are thus far less than the 7-9 inch stubble heights called for under the best scientific information available, such as the WAFWA guidelines discussed above; and demonstrate that grazing under BLM's current management will result in far more utilization and seriously inadequate cover for*

sage grouse on the allotments in question. Plus, BLM's woefully inadequate upland utilization levels and hand full of riparian stubble heights are not required Terms and Conditions on grazing permits, so there is no assurance that compliance will occur.

In many areas across the allotments, livestock grazing has caused depletion of larger-sized native bunchgrasses capable of providing grass heights sufficient to mask sage grouse nests and to protect nests and chicks from predation. These larger "decreaser" grass species have been replaced with smaller "increaser" grasses like small Poas (bluegrasses) or unpalatable weeds.

Sadly, BLM is not even committed to maintaining areas with larger sized grasses, or that are that are still in more intact and in better ecological condition. For example, instead of acting to conserve and enhance wildlife habitat to the maximum extent possible in these allotments, BLM continues high stocking rates that will lead to further depletion and accelerated weed invasion, plus an array of projects that will lead to shifted and increased use (see Map 16) in previously less used areas that may serve as refugia for native species. These projects would extend heavy livestock use into previously less grazed areas – and result in extreme new degradation and habitat fragmentation, as has occurred in association with other water developments and fences throughout the allotments. BLM plans to shift livestock use to better condition communities with native herbaceous vegetation components to perpetuate high stocking rates.

Response to **[C74]**: See response to **[D22]**.

We Protest BLM's Failure to Consider Harmful Impacts of Existing and Proposed Livestock Facilities, and Habitat Degradation and Fragmentation

Reason **[C75]** *A growing body of scientific evidence demonstrates the negative impacts of fences and other vertical objects, as well as the increased fragmentation of sagebrush-steppe and other wild land habitats that result from placing vertical objects in sage grouse habitats. (Connelly et al. 2004).*

Response to **[C75]**: See response to **[C6]**.

Reason **[C76]** BLM must conduct a full inventory and assessment of all existing livestock facilities and developments on the allotments, all water haul and salting sites, and all vegetation treatments that have been conducted on these lands. BLM's maps lack full representation of seedings and other projects. The full array of direct, indirect, cumulative and synergistic impacts of these projects and activities must be assessed.

Response to **[C76]:** The LCGMA preferred alternative, as well as all other alternatives in the LCGMA evaluation and revised EA, were analyzed with the knowledge of existing rangeland improvement projects. Discussions on the impacts of proposed rangeland improvement projects can be found in the revised EA. There are no water haul sites in LCGMA due to its remoteness and lack of infrastructure to support such actions. BLM has no information as to the location of salting sites in LCGMA, nor is BLM required to. BLM has addressed the placement of salt in the terms and conditions of this decision.

On Map 6 of the LCGMA evaluation the accurate extent of all rangeland seedings in LCGMA are shown. These seedings, and all pastures in LCGMA, were assessed as part of the GMA process.

A substantial body of scientific information demonstrates the harmful impacts of fences and other range developments on sage grouse. Sage grouse evolved in an open landscape without vertical structures, and they naturally avoid using areas near these structures - which include fences and fence posts. Sage grouse habitats are fragmented by fences and other facilities associated with grazing (USFWS 69 Federal Register (77) at 21490). Fences and other facilities (as associated with wells, pipelines, troughs and water developments in the three allotments) provide perching locations for raptors, and associated roading that grows up along fences or in association with other livestock facilities provides both travel corridors for predators and conduits for weeds (69 Federal Register (77): 21490). Mechanical treatments and seeding with exotics degrades sage grouse habitat by altering structure and composition of vegetative community (69 Federal Register (77): 21488). Development of springs and other water sources to support livestock in upland shrub-steppe habitats can artificially concentrate domestic and wild ungulates in sage grouse habitats, and worsen grazing impacts (69 Federal Register (77) at 21489). Direct mortality of sage grouse from collisions with fences is described in the WAFWA guidelines at 977, and USFWS in 69 Federal Register (77) at 21492.

Sage grouse are a landscape-scale species, inhabiting large, interconnected expanses of sagebrush. A mosaic of fragmentation now exists across many parts of the landscape, including portions of these allotments, and BLM's Proposed Action would extend and worsen fragmentation effects across the landscape. Causes of habitat fragmentation include vegetation treatments and removal of sagebrush, wild and prescribed fire, livestock facilities and zones of livestock concentration. There is mounting evidence of long-term negative effects of fire on sage grouse populations (WAFWA Conservation Assessment at 4-16, 7-28), much of the land area in the Great Basin and Interior Columbia Basin is susceptible to displacement by cheatgrass (WAFWA CA. at 7-17 and Fig. 7.10). Wyoming and basin big sagebrush and salt desert shrub cover types occupy > 40% of the Great Basin and are the cover types most susceptible to displacement by cheatgrass (these areas comprise large portions of the three allotments). The ecological effects of livestock grazing grazing may alter vegetation communities, water and nutrient availability and soils so that lands cross thresholds from which the system can not recover (WAFWA CA. at 7-29 to 32). Habitat treatments have consequences for the habitat dynamics and wildlife use of habitats – and "each potentially decreases the suitability of sagebrush for wildlife" that depend on large, unfragmented sagebrush habitats" (WAFWA CA at 7-32). Evaluation of sagebrush communities primarily based on their ability to produce livestock forage, may result in extensive alterations that are unsuitable for sage grouse and other species dependent on sagebrush habitats (WAFWA CA at 1-3).

Fences influence livestock and predator movement, facilitate spread of exotic plants, provide travel and additional access for human disturbances, increase mortality due to direct collisions, and increase predation rates by providing perches for raptors (WAFWA CA at 7-34 to 35).

Fences used to control grazing further modify the landscape by creating an artificial mosaic (WAFWA CA at 7-35), and allow more intensive grazing and loss of necessary habitat components such as residual grass cover for nesting. Intensified or more uniform use inside fenced areas results in patterns of unusable habitat across the landscape. Water developments influence the composition and relative abundance of plants (WAFWA CA at 7-35). Thus, infrastructure to support grazing programs including fences and water developments have both direct and indirect effects on the landscape (WAFWA CA at 13-9). Grouse may not commonly use water developments, and "water developments tend to attract other animals, and may serve as a predator "sink" for sage grouse, i.e. grouse fall victim to the many predators attracted to water developments (WAFWA CA at 4-12).

The Conservation Assessment describes impacts of disturbance of sagebrush habitats by vegetation treatments (at 13-6); depletion of native vegetation facilitating cheatgrass invasion (at 13-7); problems associated with blocks of crested wheatgrass and exotic seedings (at 13-7 to 8); landscape-level concerns – including that areas with larger patches of sagebrush remaining receive lower precipitation and are the least resilient to disturbance (such lower

precipitation areas characterize much of the area of the LCGMA allotments allotments, and this highlights why careful management of these lands is crucial) (at 13-8 to 9).

Reason **[C77]** *An array of livestock facilities has already been constructed throughout the allotments to facilitate, extend and concentrate livestock grazing. These facilities include wells, windmills, spring developments and water diversions, pipelines, troughs, stock ponds – at times dug into and destroying springs, fences and corrals. Some have fallen into abject disrepair – windmills lie crumpled on the ground, junk tanks and troughs are strewn across the landscape. Fences have improper spacing. Not only do these facilities concentrate large numbers of livestock with deleterious impacts to soils, vegetation and wildlife habitats in their vicinity and radiating outward over broad areas, unplanned roading is often directly related to construction or maintenance of these facilities. Plus, there are innumerable livestock salting or mineral supplement sites, too, which also result in zones of intensive livestock disturbance and incidental roading. All of these areas of livestock concentration, where heavy and severe livestock use has compacted soils and destroyed cover and food for wildlife, exhibit harmful impacts to vegetation and native wildlife habitats. These developments and zones of intensive disturbance fragment habitats, and cover and food, for native species including sage grouse (Braun 1998; Freilich 2003; Connelly et al. 2004). Such projects have been constructed throughout habitats critical for sage grouse and other shrub-steppe species. New pipeline spurs incrementally constructed would extend and shift livestock use to new and less grazed areas, as the vegetation has been depleted by livestock around existing artificial or natural water sources (Sada et al. 2001).*

Response to **[C77]**: See responses to **[C6]** and **[C22].**

BLM must conduct an EIS that assesses a wide range of alternatives that do not expand pipeline systems, fences, facility networks, salting, water hauling, etc. – activities that cause harmful impacts resulting from the increased livestock use associated with them - including depletion of native vegetation communities, loss of microbiotic crusts, and weed invasions. These alternatives must also focus on reduced stocking rates to protect or restore LCGMA lands. BLM must act to remove harmful projects in important special status species habitats, restore seedings to native vegetation, and manage these lands of important conservation concern for an array of values, and not just sustaining high stocking rates for the financial benefit of livestock permittees. BLM lands are littered with an array of failed or derelict livestock projects that need to be cleaned up.

Lands that are distant from livestock water sources comprise the best remaining healthy native vegetation communities and are thus very important habitats for native sagebrush-steppe species – precisely because they have been far less altered by livestock impacts. Sadly, it is precisely such areas where BLM's Proposed Action would construct a network of new livestock facilities, thus further degrading and fragmenting sage grouse and other wildlife habitats. On top of the existing network of facilities (and junk littering the land), BLM plans to construct many new projects, thus greatly expanding the zones of disturbance and intense livestock concentration.

Networks of roads associated with livestock facilities in the these allotments already serve as conduits for exotic plant invasions (Gelbard and Belnap 2003), and travel corridors for predators (Braun 1998, Connelly et al. 2004). The development of a maze of roads fragmenting the landscape has resulted from the proliferation of livestock

facilities across the landscape. Roads grow up as projects are constructed and maintained, and will increase significantly under the proposed livestock development actions.

Reason **[C78]** *Many of BLM's past spring development projects in southern Idaho, eastern Oregon and northern Nevada have completely dried up all surface flows at springs. Yet BLM's Proposed Action makes no commitment to restore these damaged areas, instead proposing to "develop" many more springs without consideration of the spring characteristics, water volumes and flows, and many other important features. Plus, since BLM spring projects have so degraded and destroyed springs, the protection of remaining unaltered spring sources from trampling and grazing harms by applying protective standards of use is made more imperative.*

Instead of attempting to rest to enhance habitats or jump start recovery, or place strict use limits on degraded riparian areas, BLM relies overwhelmingly on the construction of a series of band-aid fenced exclosures, with accompanying development and de-watering of wetland areas through piping water to troughs. Large areas outside exclosures then become a wasteland.

Response to **[C78]**: See responses to **[C3]** and **[C4]**.

Reason **[C79]** *An increasing body of science demonstrates that fences are harmful to sage grouse and many other species of native wildlife, and that sage grouse may avoid use of areas near fences. Thus, BLM's small exclosure proposals may in fact further fragment habitats, rendering scarce springs and seeps (if surface waters are not killed by the development itself) unusable by grouse, while create extended wasteland areas in their surroundings, causing expanded environmental harm.*

Response to **[C79]**: See responses to **[C6]** and **[C22]**.

Reason **[C80]** *Risks to sage grouse associated with livestock facilities, include: "man-made structures near lek areas, including fences, pit reservoir berms, corrals that serve as perches/rests for avian predatory species and vertical structures that could limit sage grouse vision or act as 'intimidating factors' ". See Elko BLM Owyhee allotment evaluation. Unfortunately, BLM proceeds to ignore such risks and authorize construction of vertical structures across the allotment, on top of the network that already exists. Instead of taking strong and decisive action to restore and enhance habitats and populations, Vale BLM pursues a path of new and extended habitat alteration and fragmentation across the allotments. BLM has never revealed the extent of chronic livestock degradation.*

Degradation, fragmentation and loss of sagebrush across landscapes has imperiled the sagebrush-steppe avifauna. Besides the many effects described for sage grouse, these habitat changes and fragmentation have been shown to affect abundance of shrub-steppe birds Paige and Ritter 1999, Knick et al. 2003, Connelly et al. 2004 at 1-3.

The habitat for many native wildlife species across these allotments is already fragmented. Fragmentation would continue and escalate with new livestock developments, livestock management practices that result in zones of livestock concentration, and other disturbances

under the "Proposed Action". Disturbance and depletion associated with livestock grazing and associated rangeland developments serve to break up and fragment the continuous cover of native sagebrush-steppe vegetation necessary for many sagebrush-dependent wildlife species survival (Knick and Rotenberry 1995; Knick et al. 2003; Freilich et al. 2003; 69 Federal Register (77), Connelly et al. 2004).

Response to **[C80]**: See response to **[C22]**.

This all demonstrates why BLM must abandon the "Proposed Action", conduct necessary expanded studies and prepare an EIS to develop a new management strategy to enhance and restore special status species habitats (including establishing long-term reference areas or new sagebrush ACECs), comply with its Land Use plan, and as also required under its own policy for special status species.

PROTEST DOCUMENT "D"

These are additional Protest points from ONDA and WWP. We Protest BLM's failure to adequately address each topic heading below (topic in capital letters!).

BLM'S DUTY UNDER FLPMA.

BLM is required under FLPMA to consider present and potential uses of the public lands, and the scarcity of values involved. In 2000, a comprehensive compilation of the significant and outstanding public land values of the Owyhee-Bruneau Canyonlands (contiguous to the Owyhee allotment) found large areas of to be suitable for designation as a national monument. It is one of the best remaining examples of the wide-open country that once characterized the American West. It consists of high sagebrush plateaus incised by a system of deep, sheer-walled canyons that are unique in the World. Many, if not all, of these same values are found in the lands subject to this analysis.

Recent scientific assessments conducted under the Interior Columbia Basin Ecosystem Management Project (ICBEMP) predict that the Owyhee Uplands are the last place in the Interior Columbia Basin where sage grouse will persist, and recognized the importance of the still mostly intact native plant communities for the long-term persistence of sagebrush biota, as well as the grave threats of growing exotic species invasions that could ultimately doom these lands. (Wisdom 2000). These studies are now buttressed by a number of comprehensive new analyses (Connelly et al. 2004, Dobkin and Sauder 2004, others) that show the tri-state area of Idaho, Nevada and Oregon) as the heart of one of the largest remaining blocks of relatively intact sagebrush-steppe. Plus, the this area is unique in the arid American West as being the largest area between paved roads, and so provides unique and outstanding conservation and outstanding recreation opportunities. These lands provide great opportunities for BLM to actually fulfill its duties under FLPMA, and act to stop further ecological harm from occurring to relatively intact landscapes; to undertake meaningful conservation actions to enhance and restore damaged or degraded sites within these lands (i. e. restore "developed" and de-watered springs); control and obliterate unneeded roading that has grown up without authorization as livestock projects have been constructed or maintained). BLM must also remove roads to salting sites, and require

ranchers to use horses rather than drive in fragile sagebrush lands. BLM must remove harmful livestock projects that may be fragmenting sage grouse, pygmy rabbit or other habitats and that serve as epicenters of weed invasion. These actions are needed to restore composition, structure and function of sagebrush communities.

Scientific alarm at the imperilment the sagebrush-steppe ecosystem, (Billings 1994, Ricketts et al.1998, Wisdom et al. 2000, Wisdom et al 2003. Knick et al. 2004, Dobkin and Sauder 2004 and many others) elevates the need for protection of remaining intact habitats and restoration of fragmented habitats within the Owyhee ecosystem as vitally important at the national level.

Reason **[D1]** *Given the acknowledged national significance of the lands in the Owyhee ecosystem that spans the states of Idaho, Oregon and Nevada, and relatively sagebrush communities in portions of these allotments, BLM can not undertake a typical livestock-centered planning process, as has unfortunately been occurred here – where BLM goes to any means necessary to avoid reducing AUMs. BLM needs to go back to the drawing board, and undertake an EIS process that does justice to the significant public lands values of these allotments. Protection and enhancement of important values, not new rangeland development scheme, must drive the EIS effort and a range of reasonable alternatives.*

> Response to **[D1]**: See response to **[B1]**.

Reason **[D2]** *The EIS must focus on management to protect intact landscapes of sagebrush plateaus and uplands, rare desert spring complexes and intricate canyons. This is necessary to provide unfragmented core habitat for sage grouse, pygmy rabbit, raptors, sagebrush-obligate migratory birds, other sagebrush-dependent species obligates such as pronghorn, and California bighorn sheep.*

> Response to **[D2]:** BLM management under the proposed action is expected to substantially protect wildlife habitat qualities within LCGMA. The reasons and rationale have already been stated in the Revised EA.

BLM must also protect rare and endemic plant and animal communities and very important cultural sites. The diminishment, degradation and often disappearance of springs and other surface waters in as a result of livestock degradation and/or development is a serious and expanding threat to the persistence of native biota. Reason **[D3]** *Existing spring developments in these lands have been dug into cultural sites, and water piped across these sites. Troughs are placed in areas that are part of the cultural locale, where artifacts are still being exposed from soil erosion and livestock disturbance. Removal of such facilities must be considered under all alternatives.*

> Response to **[D3]:** BLM has or will abandon six spring developments in LCGMA since conducting riparian assessments in 2000. These sites are identified in the Evaluation. At each site, all spring water collection areas will be capped, and all troughs, plumbing pipes, and hardware

will be removed. In addition, all old rusted troughs, fence posts, and pipes will be removed from rangelands to improve aesthetic conditions in LCGMA.

BLM must recognize the current and potential value of portions of these lands as reference sites in scientific research, and as part of a minimally fragmented ecosystem that is critical for species restoration and long-term population viability. In the increasingly developed US, the value of Louse Canyon GMA lands as an enclave of solitude and open space is great.

While recognizing, protecting, and enhancing special status species habitats and other important values, BLM must also grapple with ongoing livestock grazing degradation of riparian areas and uplands in portions of these allotments; invasive species (primarily caused or extended by livestock disturbance, facilities and /or associated roading); fragmentation caused by grazing installations/livestock facilities, fire and other factors; OHV use exacerbated by livestock facility-associated roading and inadequate OHV protections under the SEORMP for significant wild land areas; and other impacts of livestock grazing that are increasingly fragmenting sagebrush habitats.

We propose designation of an ACEC of sufficient size to truly protect the very important and significant values of this landscape. The SEORMP fails to provide a management framework that allows necessary protections.

IMPORTANCE OF COLLECTING SYSTEMATIC DATA FOR DEVELOPING ALTERNATIVES AND ANALYZING OUTCOMES

Reason **[D4]** *BLM must collect adequate baseline biological data on wildlife habitats and populations and vegetation and other ecological conditions in these lands. This will require a minimum of two years of intensive effort, and must include new on-the-ground inventories for special status species and analysis of habitat conditions for these species.*

Response to **[D4]**: The agency is not required to collect 2 years of baseline survey information for analysis in a Range Health assessment as WWP suggests. BLM is required to use the best available information for analyses and it did so to craft LCGMA alternative analyses.

WWP's demand for vegetation data quality at the next scale below the SEORMP will not be attainable even when the agency eventually does acquire Ecological Site Inventory (ESI) data (which is the highest quality rangeland vegetation information BLM can obtain). This is the case because ESI data is mid-scale resource information which frequently describes nested soil/plant inclusions within predominant soil types without reference as to where those inclusions actually lie on the landscape. ESI data acquisition is a very time consuming and laborious task which BLM is not likely to further refine for the purpose of a Range Health assessment, which is the step that would need to be taken to answer WWP questions about habitat patches, distributions of bluebunch wheatgrass understories versus squirretail understories, and animal populations. BLM expects to complete about 300,000 acres per year of ESI data acquisition when the effort begins.

> The level of information being demanded by WWP can only be attained within the realm of scientific research and not an assessment.

This information must be thoroughly and systematically collected, as it will be used in developing actions that will govern management here for the next decade or longer. BLM must also work with agencies in Idaho and Nevada to conduct systematic inventories and to better understand the current uses of these lands and habitats by wildlife populations, including special status species, shared across a tri-state area.

LIVESTOCK GRAZING SUITABILITY ANALYSIS AND OTHER STUDIES

BLM is required under the Taylor Grazing Act to set forth its criteria and assessments for grazing suitability determinations. The TGA was passed to "stop injury to the public lands by preventing overgrazing and soil deterioration", and to determine that land is "chiefly valuable" for grazing. FLPMA requires that BLM undertake an exhaustive and continuous inventory of the public lands and use this inventory to develop land use plans. NEPA requires that an agency provide a "full and fair discussion" of significant environmental impacts, take a "hard look" at the environment and impacts of various alternatives, and that statements shall be supported by evidence that the agency has made the necessary environmental analyses. NEPA also requires the use of sound science.

Reason **[D5]** *BLM must provide a two-part grazing suitability analysis that:*

1) *Catalogues and describes lands unsuitable for grazing due to lack of herbaceous vegetation "production"; distance from natural water sources; slope, rockiness (much of these allotments); existing environmental damage (downcut gullies, wet meadows with shrinking wetted areas due to livestock damage, lands "at risk" to weed invasion); lands so seriously depleted that they are no longer able to support livestock grazing on a sustainable basis; and lands that are "at risk" of crossing thresholds (due to livestock degradation) from which recovery to native vegetation communities will not be possible due to dominance of exotic species.*
2) *Catalogues and describes lands unsuitable for grazing based on their important values to: rare and declining species, functioning ecosystems; recreational uses; cultural sites; aesthetic values; and other legitimate uses and values of public lands that are harmed or degraded by the chronic effects of livestock grazing and management activities and associated disturbance.*

We are unaware of any such past suitability analyses that have been conducted in Vale lands. If they exist, please provide them for public review as part of this process, and use best available science, and collect on-the-ground information necessary to up-date them. Old adjudication claims can in no way be considered "current", nor can they reflect current scientific knowledge of suitability of many of these lands for livestock grazing in the face of dire threats posed by weed invasions and habitat loss.

Response to **[D5]**: See response to **[B25].**

BLM's actual use and utilization data show that there is adequate forage to support the numbers of livestock that would be authorized by implementing the preferred alternative of the Revised EA. These data give BLM a better representation of the capability of these public lands for livestock grazing than WWP's proposal would provide. Therefore, BLM will not conduct the WWP's suggested studies because they would not provide better data than BLM already has, and would consume a great deal more time attempting to gain information that BLM deems repetitive.

Reason **[D6]** *In reality, the old "adjudication" process grossly over-estimated the ability of the land to sustain livestock grazing. Gross exaggerations of available AUMs were made in adjudication processes were largely carried forward in the outdated land use plans. Given the ongoing depletion (as shown by BLM's own limited monitoring data such as loss of larger sized native bunchgrasses, with only scant Poa or Squirreltail remaining in many areas, or cheatgrass dominance as primary "forage"), and weed invasions resulting in wildly fluctuating and unreliable annual forage production, and other factors affecting these lands.*

Response to **[D6]:** See response **[B26].**

BLM must abandon the mindset that endless forage exists to support the grossly inflated permitted AUMs, and stop carving up the landscape with new livestock projects that will harm refugia of better condition habitats for native species - in a futile attempt to support these unsustainable numbers of cattle. A key part of needed analysis is determining unsuitable lands, and reducing AUMs accordingly.

The new assessment/inventory of acres of lands suitable and unsuitable for livestock grazing, and capable and not capable, must be based on scientifically accurate criteria, be comprehensive, and include collection of on-the-ground data on condition and health of soils, microbiotic crusts, native vegetation (quality, quantity, production), habitat values and quality, and effects of depletion or fragmentation on special status species, the relative scarcity of values, etc.

Examples:

- Across large areas of the allotments, depleted Wyoming big sagebrush and low sagebrush communities require 20 acres or more to support a single AUM. These lands are increasingly being invaded by cheatgrass, bur buttercup, halogeton, white top and other weeds as livestock further deplete and trample vegetation and soils. Yet grazing continuing to eke out AUMs across dozens of acres differentially impacts the remnant native grasses (*Oryzopsis, Stipa, Agropyron*), and forbs, alters shrub structure, tramples soils creating ideal conditions for weed establishment, removes plant materials necessary for food and cover for special status species and other important components of the food chain– such as small bird, mammal and lizard prey of raptors. This results in further depletion of remaining native vegetation communities and tramples and destroys remnant microbiotic crusts (especially since that one AUM has to roam over large areas to find enough to eat. In these lower elevation lands under current management and in its

proposed action, BLM appears to be managing FOR cheatgrass and weeds, and doing all it can to foster continued harm. In this EIS effort, BLM must admit that portions of these lands are NOT suitable for grazing, remove livestock and reduce AUMs. Once productivity drops below a certain level, lands should not be available for grazing use.

- Less fragmented and relatively intact lands in the Owyhee and Big Springs allotment that are essential for maintenance and recovery of sage grouse, raptor prey, migratory bird, pygmy rabbit and other important or special status species populations, and where this feature is being harmed by the grazing of large numbers of AUMs and/or threatened by new livestock facilities or vegetation treatments should be found unsuitable for grazing – giving the increasing importance of these competing values. The solution is not to juggle seasons of use and construct more projects (that's what the failed Vale project was all about) - but to determine, when weighing relative values, if livestock grazing is a compatible use of this land, or if it should be withdrawn from grazing.

- Depleted seedings that have lost productivity should be identified for restoration to native vegetation, and removed from the "forage" base. If ranchers did not take care of seedings, the public deserves to have the lands restored and taken out of the forage base. Their depletion shows that grazing livestock on them is unsustainable.

By failing to adjust stocking rates to reflect the suitability, capability and productivity of lands for livestock use, BLM is artificially inflating and propping up the sale values of public land grazing permits, plus keeping the door open for the livestock industry to exert political pressure to graze livestock far in excess of sustainable levels, and casting aside other values of public lands.

Lands in the EIS area must also be assessed for suitability in comparison with/weighing against their other uses by society (rare species habitats, scientific reference area value, recreational uses, etc.).

PROTECTION OF NATIVE VEGETATION

Reason **[D7]** *First and foremost, BLM must use current ecological science to develop a range of alternatives that act to protect remaining native vegetation communities from activities that result in disturbance that could lead to weed invasion/proliferation of exotic species that threaten the sagebrush biome and that would lead to their ultimate further fragmentation.* Protection of these communities is the first step to ensuring that their ultimate restoration may be possible. BLM must conduct a current inventory of native plant community condition and restoration needs.

> Response to **[D7]** In the formulation of the Revised EA's preferred alternative, BLM has taken necessary steps to protect these public lands from threats of noxious weeds and exotic species. See Revised EA at page 75. BLM is requiring that sections of new pipelines installed in newly disturbed areas not have service roads, which will reduce the risk of exotic species establishment.

BLM has crafted an alternative that will protect the resources and provide for a sustainable level of grazing use.

DESCRIPTION OF SPECIAL STATUS SPECIES, LANDSCAPES/ECOSYSTEM VALUES, WATERSHEDS AND AQUIFERS AS A BASIS FOR ENVIRONMENTAL ANALYSIS

Reason **[D8]** *BLM must include a description and analysis of all the significant sagebrush, spring, playa, watershed, and special status species habitat values of the allotments and surrounding lands. This includes a discussion of the regional and national significance of.less-fragmented sagebrush landscapes, wild raptor habitats, etc. sage grouse habitats, etc.* For example, BLM should describe the setting, and discuss in detail the unique and significant biological features of the lands, as its first and foremost consideration. This process should be seen as an opportunity to evaluate the ecological and conservation significance of these lands from the standpoint of special status species and scarce desert waters. BLM must consider livestock grazing as one of many uses of these public lands, and analyze it accordingly.

Response to **[D8]**: BLM did describe the special un-fragmented character and special status species of wildlife within LCGMA in the Evaluation on the basis of field observations and the best available information.

This analysis must encompass native vegetation, soils, microbiotic crusts, native wildlife specie occurrence and habitats, special status species occurrence and habitats, roadless and wilderness-suitable lands, fragmentation, weeds, desertification, etc.

We believe it is necessary for BLM to establish a large ACECs to protect the significant special status species, conservation, watershed and wild land values of the Allotment lands. (Nomination Attached). BLM should designate RNAs, embedded within a larger matrix of an ACEC of sufficient size to protect important ecological values.

Descriptions of the Relevant and Important Values and Nomination for an ACEC is being submitted with these comments. We ask that BLM work with us as we finalize boundaries once weather again allows access, and we can conduct on-the-ground surveys of these lands and the array of Threat factors affecting them.

Large ACECs and seasonal avoidance criteria should be part of the EIS process - for example, all identified sage grouse habitat should be withdrawn from ALL new development of livestock water, due to the habitat fragmentation that could occur if facilities are built or long-defunct projects re-built. Subsequent increased chronic depletion of vegetation would occur.

Seasonal avoidance of livestock grazing should occur during periods when sage grouse and migratory birds are nesting, when pygmy rabbit young are in shallow natal burrows, etc.

ALL WSAs, recommended Wild and Scenic Rivers, significant unroaded lands suitable for wilderness, should be protected from new or increased livestock intrusion in all parts.

ROADLESS WILD LANDS/WILDERNESS

Reason **[D9]** *BLM must use this planning process to expand its understanding of unroaded lands beyond that of the out-dated, deeply flawed and politically biased wilderness inventory process of over 20 years ago.*

> Response to **[D9]:** There are no data or information provided to support the statement that the BLM wilderness inventory process, or the inventory findings by Vale District when applying that process during the late 1970's, was deeply flawed, politically biased or outdated.

The importance of large parcels of interconnected unroaded wild lands in these allotments becomes greater with each passing day – as more information about roads causing disturbance to species during sensitive times of the year, roads serving as conduits for weed invasion (Gelbard and Belnap 2003), with weeds then being spread into wild lands by livestock, and road impacts to watersheds, is gathered.

FLPMA requires BLM to undertake a continuing inventory of the public lands and to use this inventory to develop land or resource management plans.

Reason **[D10]** *Review of BLM's own records on the 1979-1980's wilderness inventory process show that BLM engaged in flawed, biased and irrational analysis.*

> Response to **[D10]:** See response to **[D9].**

It focused primarily on canyons or very rugged mountainous terrain, and rejected plateau, basin and alluvial fan lands where the livestock industry hoped to increase livestock use through construction of new livestock installations or "treatments". Reason **[D11]** *Besides being fraught with political bias, the lens through which BLM evaluated roadless values in those bygone days is outdated, and unsupported by current scientific knowledge of the accelerating fragmentation of sagebrush habitats, and the sensitivity of sage grouse and many other species to disturbance or habitat degradation resulting from roading, the need for large intact landscapes to protect native species and biodiversity, and the grpwing ublic appreciation of wide open spaces.*

> Response to **[D11]:** Provision for sagebrush habitats, special status species and protection of native species and biodiversity does not equate to nor limit needed management under the BLM's wilderness program. Management prescriptions other than protection under the agency's wildernness program can provide appropriate actions to address such resource concerns.

BLM's old inventory in the neighboring Idaho Owyhee rejected nearly all plateau sagebrush lands because "a visitor could only find a sense of monotony" in the early 1980s. Yet by the time BLM's 1991 *Idaho Wilderness Study Report* was published, BLM was singing the praises of the

expansive vistas and feeling of wild untrammeled spaces of the bits of plateau country included in the canyon-focused WSAs.

Reason **[D12]** *BLM must conduct a current inventory of all roading*,

> Response to **[D12]**: Outside of those areas presently designated for motorized vehicle use limited to designated routes, the remaining vehicle routes presently not inventoried will be inventoried through the District's transportation plan, a plan to be tiered from the SEORMP.

and evaluate its impacts in fragmenting habitats for special status species, and all threats posed to these species habitats (weed spread – especially when coupled with the added impacts of livestock crisscrossing road conduits and spreading weeds into adjacent wild lands, catalytic converter fires from recreational use on such roads, etc.). On BLM lands, roads are often the result of livestock facility construction or maintenance.

Reason **[D13]** *In addition, BLM must use this effort to newly evaluate and add to an understanding of: Naturalness, solitude, primitive and unconfined recreation, special features in the four existing WSAs in these allotments. Plus, BLM must update the "Special features" that in 2004 certainly includes presence of sage grouse or pygmy rabbit habitat, presence of native vegetation communities with minimal exotic species infestation, importance of large unfragmented "sagebrush sea" expanses, etc.*

> Response to **[D13]:** BLM's wilderness recommendations are presently with Congress. Pending congressional action on the wilderness issue, BLM is not in a position to change its wilderness recommendations. Also see response to **[B8]**.

Reason **[D14]** *Impacts of livestock grazing on WSAs or other Roadless land values must be thoroughly evaluated under all alternatives*.

> Response to **[D14]**: Impacts of proposed livestock management on WSA's was evaluated and analyzed in the Revised EA, pages 197-201.

THE SAGEBRUSH SEA

Reason **[D15]** *Sagebrush plant communities Westwide are besieged by an array of threats.*

> Response to **[D15]:** BLM discussed the west-wide threats cited by WWP and has addressed the subject in the Revised EA.

These threats include exotic species, altered fire cycles, continued disdain in the eyes of the livestock industry, continued destruction by livestock grazing: livestock alteration of the native herbaceous understory with resultant cheatgrass invasion; livestock breaking or consuming sagebrush or other shrubs and destroying the physical structure with resultant destruction of the necessary shrub structure for nests of species such as loggerhead shrikes or overhead protection for the pygmy rabbit; plans to hack, beat, thrash, burn and otherwise remove sagebrush to

conduct "seedings" or to thin or remove sagebrush in sites susceptible to cheatgrass or weed invasion, especially under harmful grazing practices (stocking levels, levels of use, no real rest) under the Decisions. Note: Many past BLM seedings, green strips, and sagebrush thinning projects have been ecological disasters – leading to loss of topsoil, cheatgrass and other weed invasion, and loss of habitat for native species.

Public appreciation of sagebrush country values and the beauty of wide open space and Basin and Range landscapes is growing. Sagebrush dependent wildlife species are known to be rapidly declining or jeopardized (Dobkin and Sauder 2004). The protection, enhancement and restoration of native sagebrush plant communities including: Wyoming big sagebrush, Basin big sagebrush, mountain big sagebrush, big sagebrush-bitterbrush, big sagebrush islands/inclusions in low sage brush, and the various low sagebrush communities - should be the basis driving management decisions in this EIS effort. In addition, the lower elevation salt desert shrub communities interfacing with sagebrush and found in the valleys, provide essential habitat for many special status species or their prey, and must also be considered a high priority. Livestock are causing weed invasion, and shifts in shrub species and loss of shrub structure through consumption and physical damage.

SAGE GROUSE

Reason **[D16]** *Recent sage grouse research has revealed that vast acreages (across hundreds of square miles) may used by sage grouse in the course of a year. BLM must fully consider the vast acreages needed by sage grouse for leks, nesting, brood rearing, and winter habitats*. An ACEC of sufficient size to include all the lands required by populations must be designated accordingly. *We also ask that you work with the appropriate agencies in Idaho and Oregon to understand the habitat needs of wildlife populations shared between states.*

> Response to **[D16]:** BLM and ODFW in Oregon do in fact collaborate with sister agencies across state boundaries in Nevada and Idaho. Lek location data and population data are shared. BLM is well aware of the large expanses of habitat sage-grouse occupy.

This analysis must also transcend allotment boundaries – as wildlife nesting in one allotment may have critical prey bases in other allotments. Sage grouse lekking in one areas may move into other portions of allotment (or across state lines) as the year progresses.

RESTORATION

Reason **[D17]** *BLM must identify lands in the allotments to be restored to native vegetation. These include: exotic seedings, annual exotic communities, livestock-damaged native communities, areas highly impacted by livestock facilities or other management activities.*

> Response to **[D17]** BLM analyzed restoring existing exotic seedings to native vegetation in alternatives V and VI. It appeared that restoration activities would create a less desirable condition than that which exists currently because these activities would remove the sagebrush

that has established in these pastures since they were originally seeded. BLM felt restoring these pastures to native vegetation would lessen the ecological status in these pastures since they would likely have a strong grass species dominance and few shrubs following restoration activities. Restoration activities could also provide opportunity for noxious and/or invasive plant species to establish in areas where soil disturbance is required to remove the existing vegetation.

"Restoration" means returning native vegetation to a site, with ecosystem processes in a natural condition - as near to "pristine" as possible. It does mean achieving some artificially constructed "Desired Future Condition".

Reason **[D18]** *Specific areas to be restored to native vegetation composition and structure: Crested wheatgrass seedings, halogeton-infested salt desert shrub communities, cheatgrass communities.*
In addition: the degraded lower elevation salt desert shrub/Wyoming big sagebrush communities with cheatgrass understories, wet meadow complexes and springs and seeps throughout the EIS area, white top/hoary cress infested areas.

Response to **[D18]**: See responses to **[C41], [C42],** and **[C43]**. To reiterate, only trace quantities of cheatgrass were found in LCGMA. In addition, halogeton was not observed in any salt desert shrub communities in LCGMA, and there are certainly no halogeton "infestations". The only white top/hoary cress found at a spring site in LCGMA occurs above Bell Spring within the Bell Spring exclosure, a very small patch that is slated for treatment.

The first step in restoration throughout these lands is reduction or removal of livestock grazing for sufficient periods to enable establishment of fragile native species and/or recovery of native understories. Only native plants should be used in all restoration, and in all post-wildfire seeding. Passive restoration techniques, such as reduced livestock grazing or road closure should be *[sic]*

Reason **[D19]** *Fire, at present, is not an appropriate restoration technique in many areas of these allotments due to the risk associated with the threat of exotic species invasion following fire disturbance.*

Response to **[D19]:** BLM does not propose to use fire as a restoration technique in LCGMA because of potential for invasive plant expansion in Wyoming big sagebrush habitat and there are no juniper control issues within LCGMA. BLM agrees with WWP about fire impacts and disclosed similar fire risks in the revised EA.

WWP's complaint is another example of how WWP pastes narratives from other protest documents without even considering the context of the EA at hand. Thus they confuse the whole discussion of impacts by including extraneous points that do not even apply to the proposed action such as application of fire and the presence of junipers. See also response to **[D20]**.

Reason **[D20]** *The looming threat of exotic species invasions following site disturbance such as fire on livestock-degraded lands makes playing with prescribed fire a dangerous undertaking that may have irreversible consequences. Fire is simply an additional (and often drastic) site*

disturbance on top of the ongoing chronic disturbance of livestock grazing that has altered species composition, function and structure on these lands (Fleischner 1994). Until BLM sufficiently controls livestock grazing, and sites recover and heal, use of fire further jeopardizes many native plant communities. Plus, many BLM "prescribed burns" have gone awry in the past. Careful and selective cutting of trees is the best strategy to reduce "encroaching" trees.

> Response to **[D20]:** BLM finds this statement remarkable in regard to landscape treatment of "encroaching" juniper trees allegedly within LCGMA. It is obvious that the commenter "cut and pasted" this statement from another document and adds confusion by addressing resource problems that do not exist in LCGMA. BLM is aware of only six juniper trees within the entire 530,000+ acres of LCGMA. In addition, the Revised EA does not propose any prescribed fire treatment.

LIVESTOCK GRAZING AND ALTERNATIVES DEVELOPMENT

There is now an overwhelming scientific understanding of the harms to arid western lands caused by domestic livestock grazing. We refer BLM to Professor Debra Donahue's excellent recent book *The Western Range Revisited*. This book describes and catalogues the loss of biodiversity, exotic species, soil erosion, water pollution, and ask that you incorporate it as part of our comments. Note that during her professional career, Professor Donahue spent time in sagebrush habitats working for BLM on livestock-degraded lands in the sagebrush biome.

Reason **[D21]** *BLM must prepare the EIS based on this now-overwhelming and irrefutable body of scientific knowledge about the harms caused by livestock grazing to native species and their habitats. First and foremost, BLM must honestly assess harms being caused by livestock grazing, the importance of this land for other uses, and carefully and honestly evaluate whether continued grazing on damaged lands is in the public interest.*

> Response to **[D21]** In making these decisions BLM relied on the best available data and information collected from the lands and pastures within LCGMA. These data were collected following established BLM procedure and was in accordance with BLM manuals and technical references. It can be argued that data collected from the specific land that is the focus of these decisions is better information and more applicable and usable than data that addresses resource conditions at the landscape level. BLM has completed an extensive assessment and evaluation of LCGMA. Areas in need of improvement were identified and management alternatives were proposed. BLM also completed an environmental assessment that fully analyzed the effects of each alternative. All of this information was used to support BLM's final decisions, which will provide for improvement of riparian conditions where standards for rangeland health were not being met and allow for sustained grazing use in LCGMA.

If BLM, using current science and following detailed inventory and assessment finds it may be suitable for livestock as a use of public lands to continue in any areas, the EIS must establish specific measurable standards of livestock grazing use as Terms and Conditions of grazing permits. A 6" stubble height must be the trigger to move livestock from springs, seeps and riparian areas. A trampling standard of 5% or less of accessible bank area is another

trigger/threshold that must be instituted. When the 5% trigger/threshold is crossed, livestock should be removed from the area. Riparian browse use should be 15% or less on new growth.

Reason **[D22]** *Upland utilization standards must be 25% or less of native species, or levels sufficient to allow a minimum seven inch residual herbaceous stubble height, with no grazing allowed during critical growing periods or sensitive periods for native species. 10% or less browse and breakage use by livestock should be the maximum allowed on shrubs.*

Response to **[D22]:** BLM recalls that in the alternative WWP submitted to BLM and that was incorporated and analyzed in the EA as Alternative IV, WWP recommended a 35% upland utilization standard and did not specify a woody browse standard for either uplands or riparian vegetation. Now, in this document at the eleventh hour, WWP expresses new reservations about upland utilization and recommends reduction to 25% without an explanation founded in any published literature. That this level of use may be practiced by an agency elsewhere is not a justification or compelling argument for why BLM should now be using it in LCGMA. The BLM is also perplexed that WWP now demands a 10% browse standard on shrubs and 15% on riparian, when the EA sets a ≤ 30% browse standard for woody riparian species, which is working well in Trout Creek Mountain pastures.

WWP describes a seven inch herbaceous stubble height in upland habitat and considers it an appropriate trigger to move livestock out of pastures and thereby protect wildlife habitat values. Although it is not specified in this protest document, this herbaceous height figure is presumably related to sage-grouse nesting habitat requirements and taken from the WAFWA guidelines published by Connelly et al.(2000) page 971.

BLM does not dispute that WAFWA referred to an 18 centimeter (7") herbaceous cover height or that they have suggested it is tied to successful sage-grouse nesting efforts. However, as WWP is prone to do, they have interpreted and applied the WAFWA management guidelines in a misleading way. WWP is incorrect in its interpretation and application of the WAFWA guidelines as well as the alleged anticipated impacts of grazing within LCGMA, for the following reasons:

(1) Oregon sage-grouse researchers measured grass height as a function of successful nesting efforts at the end of the nesting season, which is in late May or early June. They did so to avoid disturbing nesting hens when they were actually incubating eggs. Therefore the grass height research measurement included standing dead plant material remaining (normally referred to in uplands as stubble) from the previous growing season plus any growth that would have occurred in the year the measurements were actually taken.

WWP infers in their protest that any amount of livestock utilization that diminishes grass height below 7" in nesting habitat would be contrary to the guidelines and that it is the point when cattle should be removed. They have conveniently left out the late spring or early summer seasonal context for taking this measurement, and they have used the word "stubble height" in a way that was not intended by WAFWA guidelines.

(2) Assuming that the 7" standing grass cover height is to be used as an indicator of likely nesting success, it is to be determined as a numeric average of sampled grass plants within a given area. The Oregon-based scientific paper WAFWA referred to in the guidelines (Gregg et al. 1994) talks

about average grass heights and so WWP has again conveniently left this qualifier out of their argument. The point is that a mix of grass heights, including ones less than 7" in height, could still be present in an area and still meet the 7'' guidelines.

(3) Until livestock utilization becomes moderate to heavy (40% to 60% or more) and influential over a very large area, important perennial grass structure provided by species such as blue-bunch wheatgrass is not substantially affected in the microsite locations most important to sage-grouse nesting success. The average utilization level proposed by BLM will fall within 21%-40% which means, according to *Utilization Studies and Residual Measurements,* Interagency Technical Reference,1996, page83 that; "The key species may be topped, skimmed, or grazed in patches. Between 60 and 80 percent of current seedstalks remain intact. Most young plants are undamaged". Similar language in the ROD (page F-3) showed desirable grazing us patterns for protection of wildlife habitat values. Interagency Key forage plant utilization studies are more than a simple report of how much plant material has been removed. The method also estimates what percent of the key grass plants available have not been impacted by livestock use.

Grass and forb cover close to the canopy of a big sagebrush shrub is likely the most important vegetation for concealment of grouse nest sites. This is a very important point because livestock often graze plants in the open interspaces of sagebrush steppe communities first and leave plants close to shrubs alone unless grazing impacts become prolonged and high utilization levels have been attained. BLM management in the EA will allow utilization levels below those that substantially impact nesting success over a large area. Limited water distribution in LCGMA further limits livestock grazing effects.

(4) Livestock grazing use in Horse Hill pastures and Louse Canyon Middle/Upper pastures (locations BLM has identified as likely to be the most important sage-grouse production areas) will commence after June 1, so all of the current year's growth that occurs by that time will be available as habitat structure for sage-grouse nesting and hiding. Other pastures in Campbell, Louse Canyon, Anderson or Star valley allotments will incorporate grazing rest treatments so that impacts to nesting habitat grass structure will only happen every other year.

(5) Finally, BLM has explained how it will conduct utilization studies annually and examine trend plots (3 X 3 foot plots and 100 foot line intercept plots) periodically to document range health condition and trend. To the extent that desirable key perennial grasses such as blue-bunch wheatgrass are sustained under the proposed grazing system, and utilization monitoring does not show excessive grazing use, the habitat needs of sage-grouse and many other animals that occupy sagebrush habitats will be substantially met (not maximized) within LCGMA.

10% or less browse and breakage use by livestock should be the maximum allowed on shrubs. Winter grazing desiccates native grasses, strips them of standing material necessary to protect sensitive crowns from winter freezing, eliminates food and cover for native wildlife, and typically occurs during periods when some growth actually is occurring on native plants, and needs to be very carefully controlled and/or eliminated. Microbiotic crust damage from livestock trampling occurs at all times of years - in summer when crusts are powdery dry, and in late winter and spring when moist soil conditions results in deep cow hoofprints in soft soil conditions.

Reason **[D23]** *BLM must develop a range of alternatives that rely on the implementation of measurable standards of use, coupled with significant reductions in stocking rates and active herding management by permittees, to protect lands from livestock damage. It must not backslide into the construction of even more livestock facilities, or convoluted grazing schemes when the fundamental problem is over-stocking and over-use, and the grazing of lands that under any grazing scheme will be damaged.*

> Response to **[D23]** Actual use, utilization and vegetative trend data do not indicate that grazing allotments and pastures within LCGMA are over-stocked or over-utilized. This information does prove that the preferred alternative, which will be implemented by these decisions, will allow for the protection of riparian areas while sustaining grazing use over the long term. Stocking rates for pastures will be similar to those realized under the current authorization and utilization of vegetation will occur within acceptable limits based on actual use and utilization data found in table 3 of the LCGMA evaluation.

Reason **[D24]** *In addition, BLM must conduct annual use pattern mapping to identify zones of intense livestock use. Use in no areas of a pasture/allotment should be allowed to exceed upland standards. This means there should be no sacrifice zones to livestock - such as areas close to water sources. If standards of use - upland or riparian - are exceeded anywhere in the pasture/allotment, this should be the trigger to remove livestock. The Humboldt-Toiyabe Forest (in the Santa rosa Mountains to the south of the allotments) uses utilization triggers to remove livestock from riparian areas.*

> Response to **[D24]** BLM's Vale District does not conduct use pattern mapping, and is not proposing to collect such information in LCGMA. BLM will collect information on vegetative utilization and grazing use will not exceed the maximum allowable utilization limits that are found as terms and conditions within each grazing decision.

Again, we refer you to Debra Donahue's recent book for use in your EIS analysis. We are including relevant scientific references detailing the ecological harms caused by livestock grazing. This should also be used as a basis for BLM's analyses in the EIS process. Basic references include: Fleischner 1994, Belsky 1996, Belsky et al. 1999, Belsky and Gelbard 2000.

BLM must develop a range of suitable and clear alternatives that protect special status species, watersheds and ecosystems. Please do not resort to insertion of "poison pills" in alterantives, in which an alternative contains something blatantly unacceptable to various factions of public lands users who might otherwise support that alternative.

Given the outstanding values and significance, and vulnerability to weed invasion and ecosystemic change of many of these lands, BLM must develop several alternatives that focus on ecological protection. All alternatives must have clear, measurable standards of use and objectives for livestock grazing.

WATER QUALITY AND QUANTITY

Livestock grazing is the primary (and often the only) cause of water quality degradation in the EIS area. Livestock grazing causes watershed destruction ranging from desiccation of headwater springs and seeps to downcutting and gullying of streams resulting in rapid runoff and limited water storage.

We have collected water quality samples on springs, seeps and headwater streams on BLM lands in the Owyhee Canyonlands of Idaho. Coliform and fecal coliform bacteria levels of hundreds of thousands are common. Sadly, it is precisely these areas that are critical to declining species such as sage grouse, and to pronghorn antelope who are forced to drink what is essentially a brine of liquid livestock feces, urine and mud.

Reason **[D25]** *BLM must collect baseline water quality data on springs, seeps, streams and other riparian areas during periods of the year when livestock are present, and/or runoff is occurring, as part of this process. This is necessary to allow up-to-date and informed decisionmaking on compliance with state water quality standards and the CWA, and much-needed additions to the 303d list. It includes bacterial, temperature, sediment and other data. BLM cannot merely rely on state lists - since in many cases, state agencies regulating water quality have old, or out-dated information that includes only a very limited number of sites.*

> Response to **[D25]:** See BLM's response to ONDA's Comment #31 on page 31 of the Revised EA and response to **[B35].** For additional water quality information pertaining to LCGMA, see pages 125-127 of the Revised EA.

BLM must assess the effects of livestock-caused pollution of springs, seeps and all surface waters on recreational uses, and on aesthetic qualities.

BLM must provide for compliance with water quality standards with definite triggers and responses to water quality problems that are clearly spelled out. Application of specific yearly water quality monitoring procedures must be a made a term and condition of livestock grazing permits in the EIS area. BLM must analyze watershed-scale impacts of livestock grazing.

NEW FRH ASSESSMENTS AND OBJECTIVES MEASUREMENTS

Reason **[D26]** *In the LCGMA process, BLM failed to systematically collect on-the-ground information on the health of the land and waters and prepare valid FRH assessments.*

> Response to **[D26]**: BLM did in fact systematically collect data according to agency guidance.

Plus, BLM's limited data used in the process did not represent several recent drought years. Systematic, science-based FRH assessments that include re-visiting Ecological Sites where vegetation data was collected in the early 1980s must be conducted across the allotments.

LARGE LIVESTOCK-FREE REFERENCE SITES AND WATERSHEDS

BLM must designate large (greater than 10,000 acres) sites, and entire watersheds, over several representative portions of the EIS area to act as scientific reference sites to provide refugia for native species whose habitats have been degraded by livestock grazing practices and livestock facilities, and to allow evaluation of livestock grazing impacts to these wild lands.

LIVESTOCK FACILITIES AND VEGETATION TREATMENTS

BLM has inventoried and identified many livestock facilities, range projects and zones of heavy livestock concentration such as salting or water haul sites, and present this information to the public - wells, pipelines, troughs, spring projects, fences, cattleguards, corrals, etc. The location, operating condition and state of repair of all installations must be revealed to the public, as well as their cost at time of construction, and maintenance responsibility. Junk and debris associated with facilities must also be removed. For example, if there is a rusted out cow trough sitting surrounded by a pool of mud that resulted from a spring development, the public needs to know this. How many spring-projects have resulted in drying of the spring water source? How much water is removed from the spring, and how much remains, for all spring projects? Likewise, vegetation treatments must be detailed. What is the current condition and productivity (compared to what the productivity was planned to be) of seedings? How are these projects or facilities fragmenting habitats for sage grouse, pygmy rabbit, migratory birds, etc? All direct, indirect and cumulative impacts must be identified.

How are these installations or projects/treatments impacting soils, vegetation, cultural sites, habitats, etc. on adjacent lands? How are they impacting the broader landscape? BLM must provide an analysis of range installations that may be degrading important wild land sites. Reason **[D27]** *For example, if a trough is leading to increased disturbance of soils in a WSA or a cultural site or sage grouse nesting habitat, then that trough should be removed, and lands rehabilitated.*

> Response to **[D27]**: Livestock water is limited in LCGMA and the agency is not required to eliminate troughs for sage-grouse as WWP suggests. The agency is required to mitigate impacts through utilization and season of use standards, which it has done in the Revised EA.

What threats does each of these facilities pose to special status species or their habitats? BLM must examine such impacts across land ownership lines.

Livestock permittees routinely clamor for more projects. BLM, in an attempt to appear to be doing *something* to change management and avoid reductions in livestock numbers necessary to protect public lands values, readily obliges. Past Fencing and spring-development sprees have resulted in the mess of dilapidated and harmful facilities across these allotments.
After compiling a comprehensive study and analysis of the IMPACTS of range installations, BLM must identify those which are no longer working/in repair, and also those which are causing harm to special status species, raptor prey, springs, watershed, or other important public lands values, and act to remove them. It does not matter if these facilities were built pre-FLPMA

or not. BLM must review all project information in its files, and thoroughly examine the facility network on-the-ground, visit all installations, collect complete and systematic information on their impacts on soils, microbiotic crusts, native vegetation, watersheds, wildlife, and cultural sites, and determine whether it is in the public interest to remove them and restore damaged lands.

We are tired of visiting Vale BLM wild lands and encountering seas of livestock feces, bare dirt or weeds surrounding cattle tanks, and on closer examination seeing extensive areas of lithic scatter being newly exposed by erosion from livestock concentration, or expanses of halogeton or white top emanating outward from them. In addition, even modest maintenance and protective measures for native wildlife are often lacking. Floats to promote water flow conservation are lacking, there are no wildlife escape ladders so troughs are deathtraps for migratory birds, etc.

BLM must also evaluate the impacts of fences and fence posts on special status species and their habitats. For example, if a fence is located in important sage grouse nesting habitat and it is providing perches for sage grouse nest predators such as ravens, the fence should be removed. See Connelly et al. 2004 for a discussion of harmful impacts of fences.

In the past, the construction of these facilities has been the justification for continued excessive stocking rates. A key part of BLM's analysis must be the suitability/capability/carrying capacity studies, and reduction in livestock numbers and changes in livestock management practices that includes facility removal and subsequent site restoration.

Reason **[D28]** *We remind BLM that the woefully inadequate SEORMP left half the lands in the LCGMA are completely OPEN to motorized use (see SEORMP Appendix X, Map "OHV"). This means that BLM has no way to stop new road development associated with maintenance of existing facilities, or construction of new and expanded facilities, salting, etc.*

> Response to **[D28]**: In areas designated Open to motorized vehicle use, the need, extent and location for any motorized vehicle access for new construction must be approved by BLM prior to facility development. Appropriate mitigation actions affecting access would be part of the approval. Motorized vehicular access for maintenance of existing facilities would typically use existing motorized vehicle routes associated with such facilities, unless an alternate route is determined necessary.

This further demonstrates the need for preparation of an EIS for the LCGMA area (where important habitats and cultural areas need to be closed to cross-country driving damage), and the importance of designation of a Sagebrush Biome ACEC to where management could be put in place to protect these fragile LCGMA sites.

REMOVAL OF LIVESTOCK WELLS AND PIPELINES

Reason **[D29]** *In particular, BLM must assess the impacts of all wells, pipelines, water haul sites, stock ponds and other artificial upland water sources on special status species, watersheds,*

and native vegetation, and analyze the removal of harmful artificial livestock water sources in the EIS alternatives. These artificial water sources are resulting in serious damage to surrounding lands due to concentrated and/or increased livestock use. These facilities and the excessive livestock use associated with them are a serious threat to special status species. This greatly increases site vulnerability to exotic species invasion, creates habitat and behavioral conflicts with wildlife, degrades recreational experiences, etc. These artificial water sources are not compatible with achieving enhancement or restoration of damaged special status species and sagebrush sea habitats.

> Response to **[D29]:** Impacts of livestock watering projects and sources were thoroughly discussed in the Soil, Water Resources, and Riparian/Wetland Areas section for each alternative of the Revised EA

WATER HAULING

Reason **[D30]** *Water hauling is associated with a great risk of weed infestation and spread (regular vehicle trips through weed-infested roads and roadsides, and then deposition of weed seeds in areas of livestock disturbance and ready dispersal. BLM should not continue allowing water hauling. Lands that are too arid to provide surface water to livestock should not be grazed. Water hauling leads to road damage and disturbance of wildlife, as well as ranchers clamoring for road improvement, which may lead to increased human use and disturbance of wildlife. Any sites where water is hauled - even for one grazing season - will suffer permanent harm from trampling - soil compaction, loss of microbiotic crusts, and grazing -weakening or loss of native grasses, structural damage to shrubs, depletion of desirable plants. Plus, water sources for hauling may be on weed-infested private lands (such as white top/hoary-cress infested lands), and water hauling may rapidly spread weeds into wild lands through seeds on vehicle tires, weed infestation and then subsequent cross-country spread by livestock.*

> Response to **[D30]:** Water hauling is only authorized on a case-by-case basis. BLM routinely requires permittees to haul water to only those areas that have been previously disturbed such as dry reservoirs, branding areas, and nutrient supplement areas. Many times, when winter snowpacks are low and only minimal runoff occurs over frozen soils, reservoirs do not fill to capacity. Spring rains which follow may produce good growth of rangeland bunchgrasses but will, for the most part, infiltrate into soil profiles and not contribute additional reservoir storage. When these conditions occur, many reservoirs become dry by early to mid-summer when rangeland bunchgrasses are still partially green. Hauling water to dry reservoir sites would not be a different use than when reservoirs are at normal capacity and able to provide water throughout the summer. Water hauling sites do not necessarily produce additional disturbance to all rangelands. The opportunity for water hauling in LCGMA is very limited due to remoteness and lack of infrastructure.

NO TNR

Reason **[D31]** *BLM should prohibit Temporary Non-Renewable Use (TNR) on these lands through this process. TNR use is not compatible with restoration of damaged plant communities,*

protection of special status species habitats, or maintenance of wildlife populations. TNR has typically occurred in the winter - when there are significant conflicts between wintering wildlife and human intrusion on special status species, raptor, big game and other winter habitats.

> Response to **[D31]** The LCGMA grazing decisions will issue five new term grazing permits. Term grazing permits are not the appropriate setting to address temporary non-renewable use, therefore TNR was not addressed in this process or these decisions.

SAGEBRUSH DIE-OFF AND DROUGHT MUST BE ASSESSED

Recent die-off of sagebrush has occurred on many areas of Vale lands in the Jordan RA (Jordan Valley to Arock, Oregon state line on Highway 95 to Jordan Valley). BLM must inventory and assess areas of plant die-off across these allotments and surrounding lands. Reason **[D32]** *How will any die-off affect important species habitats? What actions can be taken to minimize impacts to native wildlife? Impacts of recent on plant vigor and species composition must be assessed.*

> Response to **[D32]:** The Jordan Valley – Arock location WWP refers to is in some of the driest sagebrush habitat within Jordan Resource Area. Sagebrush die-off is likely related to the combined effects of moisture stress and natural insect attacks from species such as *Aroga* moth. BLM considers this to be a natural sagebrush mortality process and the amount of mortality present specifically within LCGMA does not appear to be anything close to what has been reported in other states such as Utah or what appears to be happening along Highway 95.

POST-FIRE REST FROM LIVESTOCK USE/POST BURN FENCING/TRESPASS

A minimum period of five years rest from livestock grazing following any wild fire must be standard operating procedure on EIS lands. This is necessary to allow recovery and establishment of native species. Grazing should then be allowed only if specific measurable criteria for establishment of native vegetation and microbiotic crusts have been met.

Only native species should be used in any post-fire seeding effort in LCGMA lands - or in any seeding effort (such as road rights-of-way, areas where cow troughs are removed, etc).

BLM should not construct new or temporary fences in burned lands. The already existing pasture fences should be used to control livestock. Electric fences very often fail, and burn trespass occurs.

Any livestock trespass of burns or areas being rested from grazing must result in permit action against the responsible permittee. The public's investment in fire rehab is often tens of thousands of dollars, and it can be destroyed through trespass.

ROAD MAINTENANCE

Reason **[D33]** *Road maintenance must be kept under control, as bladed de-vegetated roadsides provide ideal sites for weed invasion and subsequent spread by livestock criss-crossing road verges and bladed areas. BLM lands in Malheur County are increasingly characterized by examples of overkill in maintenance that results in blading huge bare swaths that serve as weed corridors on the roadsides, and unnecessary drainage furrows hundreds of feet long in relatively flat terrain. BLM must try to maintain and promote native vegetation on roadsides and keep them from becoming weed corridors (see Gelbard and Belnap 2003).*

> Response to **[D33]:** BLM disagrees with WWP that roads within LCGMA are characterized by "examples of overkill in maintenance that results in blading huge bare swaths" and "drainage furrows that are hundreds of feet long" or leaving roadsides bare of vegetation. BLM goes to great lengths to blade only as necessary within the original road prism and to place drainage furrows only as needed for proper drainage. BLM calls attention to Appendix O, "Best Management Practices" Road Design and Maintenance on pages 339-341 of the SEORMP. Therein are described 36 management practices that BLM road crews follow when constructing and maintaining roads throughout the District.

PREDATOR KILLING

Reason **[D34]** *BLM must assess the impacts of predator control actions across these lands on special status animal species and native plant communities.*

> Response to **[D34]**: Predator control activities by APHIS are not practiced within LCGMA. See response to **[C70]**.

BLM must outlaw aerial gunning of coyotes - which causes intrusive disturbance in wild land areas and may disturb sensitive wildlife species during critical periods of the year. Activities of Wildlife Services can damage public lands. For example, WS may harm public lands and values by: driving roads when muddy, disturbing wildlife during sensitive times of year; cross-country travel by OHVs spreading weed seeds, crushing vegetation or harming soils; trapping in sensitive species habitats or near popular recreation areas or important wildlife habitats; altering population structure of native predators; removing badgers that are important in providing burrows for burrowing owls; reducing predator kills and thus reducing carrion for bald eagles and some other raptors; accidental mortality of golden eagles or other raptors in traps, etc.

BLM must propose alternatives that constrain or remove WS activities from sensitive species habitats on these lands. Removal of native predators only results in increased predation problems, and upsets the stable social structure of coyotes or other native predators. If a rancher claims a predation problem, then that rancher should be responsible for protecting livestock by increased herding and vigilance. If the rancher is unwilling to do that, the livestock should be removed from the public lands.

BLM must present accurate and detailed information on the areas where predator control activities currently occur, and the amount and timing of such activities.

WEEDS/EXOTIC SPECIES

Reason **[D35]** *BLM must fully recognize the fact that domestic livestock are a primary cause of weed infestation across the LCGMA lands. Livestock: travel cross-country transporting weed seeds in mud on hooves, fur and feces; create zones of intensive disturbance that are ideal sites for infestation by weeds, harm and weaken native vegetation giving aggressive exotic species an advantage.*

BLM must identify lands within the LCGMA that are currently "at risk" for weed invasion, and identify specific preventative measures that will be taken to prevent their spread. BLM has shrugged aside the role of livestock in weed infestation, and thus has been largely ineffective in weed control. BLM continues to graze sites of known weed infestation, thus ensuring that infestations spread – as livestock are tremendous vectors of weed seed spread and create disturbance where weeds thrive. BLM's approach is obviously not working.

BLM must take all possible measures to prevent the spread of weeds into the fairly intact native vegetation communities in the EIS area, including quarantining cattle or sheep before turnout on public lands for sufficient periods for weed seeds to pass through their systems.

A rapidly expanding threat in Vale lands is white top/hoary cress, which has the potential to become established in disturbed sites - such as livestock-trampled wet meadow and spring margins, and then move out into surrounding native vegetation. BLM's past failure to act to control livestock grazing practices and reduce stocking rates has resulted in the rapid spread of this uneradicable exotic.

BLM must specify actions that will be taken to prevent infestation - such as closing pastures or allotments to all grazing until weed infestations are under control.

> Response to **[D35]:** Contrary to WWP's assertions, BLM did assess and describe the presence of cheatgrass and other weeds and found them in only trace amounts in LCGMA (Evaluation, pg 26 and Chapter 3, Rangeland Health Determinations, and the Revised EA). See responses to **[C41], [C42],** and **[C43]**.

Vehicles are also a source of weed transport, so banning cross-country travel by ORVs and closing jeep trails or minor roads in lands "at risk" for weed infestation are logical ways to limit vehicle transport of exotic species seeds. BLM's RMP, regrettably, fails to provide necessary protections from OHV cross country use, including by ranchers, for large portions of these lands.

SOILS/MICROBIOTIC CRUSTS/DESERTIFICATION

Reason **[D36]** *Livestock grazing during all periods of the year damage soils and microbiotic crusts, and increase soil vulnerability to wind and water erosion. Trampling damage to soils*

effects everything from burrows of native animals, to larvae of native pollinators to roots and mycorrhizae of native shrubs. Since harms to soils are hard to quantify and monitor from year-to-year, it is essential that BLM establish upland standards of use that provide maximum protection for soils.

> Response to **[D36]:** BLM addressed soil and microbiotic crust conditions in LCGMA though the Rangeland Health assessment process at 43 sites for upland rangeland health standard 1. Findings were fully discuss in the Evaluation on pages 50-57, and in the Soil, Water Resources, and Riparian/Wetland Areas section for each alternative on pages 122-149 of the Revised EA. The BLM earlier responded to similar comments from WWP on pages 27-28 of the Revised EA. See also response to **[C43]**.

VISUAL RESOURCE MANAGEMENT

Reason **[D37]** *BLM must designate manage large areas of roadless lands greater than 5,000 acres in size, as VRM I.*

> Response to **[D37]:** There is no requirement in BLM land use plans to designate roadless areas greater than 5,000 acres as a visual resource management (VRM) Class I. The BLM Handbook, H-8410-1, Visual Resource Inventory, states, "Class I is assigned to those areas where a management decision has been made previously to maintain a natural landscape. This includes areas such as national wilderness areas, the wild section of national wild and scenic rivers, and other congressionally and administratively designated areas where decisions have been made to preserve a natural landscape." BLM Instruction Memorandum No. 2000-096 interprets this statement to include WSAs until such time as these areas are designated as wilderness or released for other uses by Congress. The SEORMP states that existing WSAs released from wilderness designation by Congress would be managed as VRM Class II.

This is fully compatible with special status species habitat management – for example, VRM I or 2 classification would result in removal or no new construction of elevated sage grouse predator-perches in wide-open sagebrush landscapes.

CULTURAL VALUES

Important cultural sites are often located in association with rare springs, rimrocks, canyons, or scenic plateau vista areas. Threats to these sites include increasingly easy road access due road "creep" resulting from roading related livestock facilities and other livestock management. Increased or expanded improved roading leads to vandalism or disturbance of cultural sites.

Livestock cause erosion and damage or loss to artifacts and sites - particularly in the vicinity of springs, seeps and other riparian areas. Livestock facility construction causes shifts in livestock use that may lead to new or extended damage to sites – spanning the range from disturbance of rimrock stone blinds, to trampling and breakage of artifacts. Invariably, BLM's cultural specialists are forced to allow range developments to proceed, despite shifted use to new areas that may also have cultural importance.

Reason **[D38]** *Comprehensive cultural surveys must be conducted in the vicinity of all springs and seeps, and all livestock facilities, and the impacts of current livestock grazing on sites must be studied as part of this process.*

> Response to **[D38]**: Cultural surveys are not mandated in the vicinity of ***all*** springs and seeps. Ideally the BLM would have the time and personnel to conduct such a thorough survey of high probability areas within LCGMA, but lack of funding and personnel preclude that. A large number of livestock facilities were built prior to the Archaeological Resources Protection Act (ARPA). Under the BLM – Oregon State Historic Preservation Office (SHPO) Protocol, those facilities will receive a cultural resources survey if/when maintenance is performed on those projects. In addition, the BLM cultural resources staff conducts surveys of existing projects when time allows. Springs and seeps are and will be surveyed for cultural resources when land-disturbing developments are proposed, and when maintenance of range developments or projects takes place at locations not previously subject to Section 106 review.
>
> As stated in the Revised EA, "[s]pring project restorations and construction of off-site troughs would benefit cultural resources located at or near springs and wet meadows [stabilizing soils, removing livestock concentration from cultural resources sites located near springs]. Cultural resources located near streams would benefit from corridor fences and off-stream water sources, which remove livestock from drainage channels, allowing reestablishment of vegetative cover… stabilization of soils by vegetation would protect the surface integrity of cultural resource properties, keeping artifacts in their original positions." Also, it states that new locations of off-site water sources will avoid cultural resources; and it is stated that riparian fence construction will be designed to include cultural resources within their protection (Revised EA, p. 203).
>
> As many of the range developments have been in place for decades, when they exist concurrent with cultural resources the damage to cultural resources has proven to be severe. Unfortunately, in those cases the scientific value of the cultural site has been destroyed— i.e. protection of the site at this point is of no use or value.

The best way to protect cultural sites from looting is to limit roading and motorized access to sensitive areas. Please recall that I reported digging of cultural sites in the West Little Owyhee to you several years ago – so this is a real threat here. BLM must analyze significant road closures of salt site roads, or other facility roads (require routine maintenance or salt placement by horseback, limit new livestock developments - that inevitably lead to increased roading), and take other measures to limit ease of access that might damage these sites.

Livestock harm and/or destroy cultural sites in many ways, including: trampling and soil compaction breaking artifacts and destroying site stratigraphy; erosion revealing artifacts to surface collection and livestock trampling damage; erosion destroying site stratigraphy; defiling sites with large amounts of feces and urine. Reason **[D39]** *BLM must act to stop this damage under all alternatives analyzed.*

> Response to **[D39]**: The type of damage described in the above paragraph takes place where cattle congregate, primarily near water facilities, along some fencelines, in holding areas, and at salting stations. As stated above in response to **[D38]**, a large number of livestock facilities (water developments, fencelines, etc) in LCGMA were built prior to ARPA. Under the SHPO Protocol, those facilities will receive a cultural resources survey if/when maintenance is performed on those

projects. In addition, the BLM cultural resources staff conducts surveys of existing projects when time allows.

As many of the range developments have been in place for decades, when they exist concurrent with cultural resources the damage to cultural resources has proven to be severe. Unfortunately, in those cases the scientific value of the cultural site has been destroyed – i.e. protection of the site at this point is of no use or value.

New proposed projects require and receive a cultural resource survey. Cultural resources found during survey are evaluated, and protection measures for the site(s) are proposed.

PALEONTOLOGICAL VALUES

The impacts of livestock grazing and facilities under all alternatives on paleontological values of these lands must be thoroughly assessed. Paleontological values are threatened by haphazard collection (exacerbated by networks of livestock facility roads) and livestock grazing and trampling that results in site erosion, exposure of fossils or strata and other impacts. Reason **[D40]** *BLM must inventory and assess paleontological sites, evaluate impacts of grazing activities and facilities on these sites, and identify measures to be taken to protect them from damage or loss.*

Response to **[D40]**: No paleontological resources are known to exist in LCGMA; the area geology and geomorphology is not generally conducive to the formation or preservation of fossil material.

Paleontological survey is conducted, in the same way that cultural surveys are, when land-disturbing developments are proposed, and when range development (or other type) of maintenance takes place at locations not previously subject to Section 106 review.

It could certainly be stated that if/when paleontological resources are encountered, the resources will be evaluated by a professional paleontologist. When appropriate and necessary as prescribed by a professional paleontologist, preservation and protection measures will be implemented in accordance with applicable laws, regulations and statutes (specifically FLPMA at this time).

PERMIT BUYOUT/PERMIT RETIREMENT

Federal legislation implementing a buyout of grazing permits and the permanent removal of livestock grazing from the affected lands is a very reasonably foreseeable development in public lands management in the EIS area within the next few years. BLM must recognize this in its EIS process, and identify allotments the high priority for permanent protection of many of these lands – such as the better condition sagebrush communities - from livestock grazing impacts, and the value of permit buyout for restoration purposes, to protect critical habitats, to protect cultural sites, to reduce conflicts with wildlife and recreation uses, etc.

Such clear identification of lands in this process will also streamline any permanent allotment closures that may go through a LUP Amendment or other process. BLM must take all measures necessary in to make allotment closures as easy as possible.

BLM must provide clear facts and figures on who actually grazes these lands - including pastures within allotments, the number of AUMs each permittee has within each pasture, associated base properties, the various AUM categories, etc. to streamline understanding of lands at stake in the future buyout processes. As some of these lands are grazed by a group of permittees who may be running livestock in weed-infested lands in Idaho, and transporting weeds into LCGMA country in fur, feces or mud on livestock, this is of particular importance.

CONTROLLING OFF ROAD VEHICLES, ROAD PROLIFERATION AND ROAD CLOSURES

FLPMA requires that BLM prevent unnecessary or undue degradation of the public lands. We are concerned with the proliferation of OHV use by the public, and some livestock permittees. Reason **[D41]** *OHV use should be limited to only existing roads, and only within certain areas. Any trails off the designated roads must be slated for restoration.*

All roads in identified important special status species habitats should simply be designated as "Closed" - unless they are specifically signed as "Open". A Travel Plan map should be developed as part of this process.

We are aware of no lands in the area that are suitable for an "Open" designation.

> Response to **[D41]:** WWP provides no information or data to support limiting all motorized vehicle travel within LCGMA to existing roads. Motorized vehicle use designations on public lands, including LCGMA, were determined in the SEORMP, the land use planning level where such use allocations are required. Motorized vehicle decisions specific to LCGMA are tiered from decisions of the SEORMP. The SEORMP identifies exclosures and other areas with certain special status species habitats where motorized vehicle use is limited to either existing or designated routes. The district transportation plan will be tiered from the SEORMP.

ROAD REHAB/RESTORATION

A large number of the roads in the wild lands of these allotments were pioneered or constructed only because they allowed ranchers to drive salt to the top of hills, or because they access cattle installations, or have just spring up on the path of a pipeline due to construction and subsequent maintenance activities.

Reason **[D42]** *Incursions on unroaded lands are routine – such as those undertaken by livestock permittees to develop or maintain water sources, place livestock installations, place salt licks, etc. As part of its analysis, BLM must examine roading in the context of livestock activities. Roads and jeep trails whose primary purpose is placing salt or checking on a water trough should be closed and restored/obliterated. Livestock permittees own horses, and can and should use them in pursuing public lands livestock grazing.*

> Response to **[D42]:** For use of motorized vehicles for maintenance and development of range livestock facilities, refer to response to **[D28].** As public land users, livestock permittees are required to conduct their operations in accordance with OHV use designation decisions. Many livestock permittees use horses when conducting their operations on public lands.

BLM must identify methods of road closure and restoration.

ECONOMIC ANALYSES

BLM must detail its annual cost of administration of livestock grazing on affected lands under the current and alternative systems. BLM must provide the percentage of these administrative costs that are covered by BLM's income from the very low grazing fee, and present this to the public in its economic analysis.

BLM must detail its other costs in administration of these lands (recreational opportunities lost, weeds invading and treatments, increased fire suppression costs with livestock-caused weeds like cheatgrass) and present this to the public in its economic analysis. This is necessary to understand the administration of livestock grazing. Of particular concern is the lesser funding traditionally spent on wild lands restoration, habitat enhancement, collection of baseline biological data.

Then, BLM must assess the very important recreational values of this large block of public wild lands, and the importance of growing recreational uses to local and regional economies.

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

The types of impacts to the human environment expected from the implementation of Preferred Alternative III of EA No. OR-030-04-013 (EA) were anticipated and declared within the analysis of the Southeast Oregon Resource Management Plan and Environmental Impact Statement (SEORMP/EIS) and the Record of Decision (ROD) of September 2002. The site specific impacts described in the EA are no greater than those anticipated in the EIS. The EA specifically tiers to, and incorporates by reference, the analysis in the SEORMP/EIS, in accordance with CEQ regulations Sec. 1502.20 and 1502.21. To the extent there are impacts beyond those described in the SEORMP/EIS, they are not significant. The EA also incorporates by reference the Louse Canyon Geographic Management Area Evaluation of 2003, which provides the foundation (existing environment) for management alternatives analyzed.

The preferred alternative allows BLM to strike a balance between natural values and commodity uses in a manner consistent with the principles of "multiple use" and applicable law. Specific resource objectives are identified in the SEORMP ROD. Where appropriate, these ROD objectives are repeated through the impact analysis section of the EA along with indications of how these objectives would be met. For the Preferred Alternative (Alternative III), these ROD objectives, as well as more specific objectives identified in the GMA Evaluation, would be achieved through a variety of management actions, mitigation measures, projects, and land treatments without creating any significant impacts.

The EA thoroughly analyzes the impacts of a range of alternatives developed through scoping and it clearly indicates that the preferred alternative, with specific mitigation measures identified, would not significantly affect the human environment. Specific mitigation measures, described in the preferred alternative, would ensure that resource values are protected through avoidance, by reducing impact to a level that is not significant, by rectifying disturbance through

rehabilitation actions, or by compensating for the impact by replacement. Mitigation is applied to proposed actions to minimize or avoid impacts, as noted in Section 6 of the revised LCGMA environmental assessment, even though the action(s), without mitigation, may not rise to the level of "significant," as defined in 40 CFR 1508.

To make this finding of no significant impact (FONSI), BLM is required to consider the "context" (or scope), as well as the "intensity" of impacts. The "context" of the analysis is stepped down from the Interior Columbia Basin Ecosystem Management Project (ICBEMP) Science Findings (broad scale, regional analysis covering eastern Oregon, southern Idaho, northern Nevada, northern Utah, and western Montana), through the SEORMP/EIS (mid scale analysis addressing land use, covering the whole of Malheur County and a portion of Harney County) and ending with the LCGMA Evaluation and Plan/EA (fine scale, local level planning with analysis at the activity and project level). The preferred alternative, as described, would have little if any effect on the human environment at the national level or beyond. The physical effects of projects would be minuscule and largely unnoticeable even at the local level. None of the actions contemplated are irreversible and the only irretrievable commitments are in the funding and associated materials necessary to put projects in place. The short-term benefits of the new grazing systems would be immediately noticeable to only those with a trained eye and knowledge of the capability and potential of these ecological systems. The long-term effect of the preferred alternative should be a steady, measurable improvement of local ecological systems (particularly of riparian systems) that would be noticed by most observers familiar with lands in the LCGMA.

The "intensity" of impacts, beneficial and adverse, is thoroughly described in the Environmental Impacts section of the EA. Intensity is a component of "significance" and is determined by applying ten criteria (see CEQ regulations Sec. 1508.27). In review of these criteria, relative to the preferred alternative III, I have found:

Beneficial and adverse effects. Though on balance the cumulative effects are positive, there would be no significant effects (positive or negative) relative to the CEQ definition. Rangeland and watershed health, ecological functions, productivity, and upland wildlife habitat would be protected and riparian habitat would be improved by the combined benefits of the proposed actions. Cultural resources and special status species would be protected. Wilderness Study Areas (WSAs) and Wild and Scenic Rivers (WSRs), would be protected and enhanced. Outstanding opportunities for primitive and unconfined recreation would remain, and naturalness would be enhanced. The Area of Critical Environmental Concern (Toppin Butte ACEC) would not be affected. Grazing operations would be more costly to operate, but would remain sustainable.

Public health or safety. There would be no significant effects on public health or safety. The non-structural projects, such as brush control would impact a minor part of the LCGMA (less than 1% of the total land area), and would improve ecological function and productivity. Any effects associated with brush control through burning or mechanical means, by way of emissions of smoke or dust, would be short lived and within the parameters of natural occurrences. The area is extremely remote, and so the chances of affecting members of the general public in any measurable way would also be remote. Chemical treatment is not an option for brush control at

this time, and would require additional site specific NEPA analysis, as pointed out in the EA. Since it is not a viable option, it is not considered further. The structural projects involved and execution of the new grazing systems would not significantly affect public health and safety. Any threats would be localized, limited to those involved with construction and maintenance activities, and within accepted norms for such work.

Unique areas. There are some unique, specially managed areas within the Louse Canyon GMA including WSAs, WSRs, and an ACEC; however, they would not be significantly affected. Any negative impacts in WSAs, from the minor project work proposed, are offset by the cumulative benefits to ecosystem health and function which would contribute directly to enhanced naturalness. Opportunities for primitive recreation and solitude would not be diminished. Implementation of the preferred alternative with the mitigation described in the EA, including careful selection of construction materials and methods, and judicious placement to maximize vegetative and topographic screening, would adequately protect and enhance both WSA and WSR values. Fences can be removed and the physical impacts associated would be temporary in nature. Grazing systems with the supporting water projects and fences would allow for improved health of riparian systems and maintain health and function of uplands. Livestock would be excluded from additional access points to the West Little Owyhee W&SR (i.e. above and beyond those already excluded) and aid in the protection and enhancement of the W&SR values. Toppin Butte ACEC would not be affected by the proposed actions and is adequately protected by restrictions to development and use put in place under the SEORMP ROD.

Highly Controversial Effects. The new grazing systems would place new burdens on the affected ranchers, as livestock would be moved more often. The cost of project construction would be partially borne by the permittees and the maintenance responsibility would be totally borne by them. These new costs would be added to the operational costs they already bear and would certainly have negative impacts on their profits. Nevertheless, the grazing operations would remain sustainable, and rangeland health and productivity would be protected and enhanced. Similar measures have been successfully initiated by voluntary agreement with permittees here (as under the interim grazing measures initiated in accordance with 43 CFR 4180 in the spring of 2002) and elsewhere on the Vale District. Therefore, they should not be considered overly controversial. Any effects on the human environment which are related to “land use” allocation issues were addressed and decided in the SEORMP/EIS and the subsequent ROD, and are outside the scope of this EA.

Unique or unknown risks. There are no unique or unknown risks associated with the implementation of the preferred alternative. The SEORMP/EIS and this EA cover the anticipated impacts thoroughly. They rely on applicable scientific findings, monitoring, rangeland health assessments, published studies, professional contacts, and stated mitigation measures to address and/or preclude impacts.

Precedent for future actions. There are no precedents, relative to future actions with significant effects, which would be established. The specific actions involved in the preferred alternative have all been done before, separately and collectively, in the course of management of public lands over the past 50 years. There are no irreversible commitments of resources involved with the preferred alternative. The structural projects involved could be eliminated and the physical

disturbance rehabilitated. The non-structural projects (i.e. brush control) would naturally change over time as brush species seed back into the treated areas, as in the past. The brush control process would emulate natural brush removal through wildfire.

Cumulative Effects. The impacts of proposed actions have been analyzed and considered, separately and cumulatively, at multiple scales of analysis by considering ICBEMP science findings, SEORMP/EIS, and this EA. Impacts are either not significant, are mitigated below significance, or were declared and addressed in the SEORMP/EIS. The cumulative effect of implementation of the preferred alternative is also not significant and is within the scope of the cumulative effects analysis disclosed in the SEORMP/EIS, which this EA specifically incorporates by reference.

Impacts to significant scientific, cultural, or historical resources. Cultural resources (historic and prehistoric) are protected by mitigation measures that require avoidance based on surveys completed prior to any surface disturbance. Fencing of riparian areas and exclusion of grazing from these areas will protect cultural material where present. General grazing impacts on uplands are dispersed and do not pose a significant risk to cultural sites. Materials on the surface may be spatially rearranged, by various forces (natural and introduced), but the diagnostic value of subsurface materials is not significantly affected by dispersed grazing impacts.

Federally listed endangered or threatened species. The only listed species in LCGMA is the northern bald eagle, which is winter resident only and would not be affected by the proposed actions. For special status species, additional mitigation measures, such as inventory and avoidance of special status plants and surveys prior to land treatment in potential pygmy rabbit habitat, provide an extra measure of protection and conformance with Oregon/Washington special status species policy. Greater sage-grouse habitats would be substantially protected as a result of livestock utilization limits, limited project development, specific mitigation measures associated with projects, improvement of riparian systems, and maintenance of existing high quality upland rangelands.

Compliance with Federal, State, or local law. The preferred alternative is in compliance with federal, state, and local law and requirements relative to environmental protection. Further, it is in conformance with the SEORMP/EIS and ROD.

Therefore, based upon my review and for the foregoing reasons, no Environmental Impact Statement is required.

FINAL DECISION

After careful consideration of the statements of reasons included in the protests and other information pertinent to the matters addressed in this decision, **My Final Decision is** to implement the LCGMA preferred alternative proposed in Revised EA # OR-030-04-013. This decision includes authorization of your livestock grazing use on the Louse Canyon Community Allotment # 01307 in your grazing permit for operator number 3603725 with a term of 10 years beginning in 2005 and expiring in 2015.

The rangeland improvement projects described below will be constructed and maintained in accordance with 43 CFR §4120.3. The following rangeland improvement projects will be constructed in the Louse Canyon Community Allotment to facilitate livestock grazing authorized by your new term grazing permit and repair resource damage that resulted from poorly designed existing rangeland improvement projects:

Allotment	**Project**	**Quantity & Units**
Louse Canyon Community	Louse Canyon Pasture Division Fence	Approximately 8 miles
	Four Springs Exclosure	Approximately 1.5 miles
	New Road Spring road repair	Approximately ¼ mile
	Three Weeks Spring road repair	
	Rehabilitate Exchange Spring Pipeline	Approximately ½ mile
	Rehabilitate Coffeepot Springs Pipeline	Approximately 1 ½ miles
	Renovate Chato Spring	Fence source
	Renovate Chipmunk Tributary Spring	Fence source
	Renovate Horse Hill Spring	Move 1 trough
	Renovate Monopoly Spring	Move 1 trough
	Renovate New Road Spring	Move 1 trough
	Abandon Edge Spring	
	Steer Canyon Seeding Division Fence	Approximately 6 miles
	Upper Pole Creek Exclosure	Approximately 2 miles
	Steer Canyon Cattle Guard	1 cattle guard

Your grazing authorization will be modified from your existing term permit, which is as follows:

	Livestock		**Grazing Period**		
Allotment	**Number**	**Kind**	**Begin**	**End**	**AUMs**
01307 Louse Canyon Community	795	Cattle	03/01	03/15	392
	871	Cattle	03/16	08/30	4811
	493	Cattle	09/01	09/30	486
	199	Cattle	10/01	10/30	196
	20	Horses	03/15	08/15	101
	20	Horses	08/25	09/27	22
	39	Cattle	10/01	02/28	194

To:

	Livestock		**Grazing Period**		
Allotment	**Number**	**Kind**	**Begin**	**End**	**AUMs**
01307 Louse Canyon Community	778	Cattle	03/01	10/15	5857
	20	Horses	03/01	10/15	151
	39	Cattle	10/01	02/28	194

Other terms and conditions of your new term grazing permit will be:

- Grazing use in the Louse Canyon Community Allotment shall be in accordance with the preferred alternative in the Louse Canyon Geographic Management Area Standards of Rangeland Health Evaluation and Revised EA # OR-030-04-013.
- Grazing use in the Louse Canyon Community Allotment (01307) shall be in accordance with the annual grazing turnout statement.
- Maximum allowable utilization limits for pastures will be as proposed in the Evaluation and analyzed in the Revised EA, which are "light" use (21%-40%) of key plant species for native pastures and 60% of key plant species for crested wheatgrass seedings. The maximum allowable utilization limit for woody riparian vegetation, specifically willow, is 30%.
- Upon reaching the maximum allowable utilization limits, livestock would be moved to the next pasture identified in the pasture rotation. If the maximum allowable utilization limit is reached in the last pasture scheduled for use prior to the end of the identified use period, livestock would be removed from BLM public lands within the allotment. This annual monitoring requirement may result in shortened use periods for some or all pastures in years of decreased forage production, such as drought.
- You have 194 AUMs in the Louse Canyon Community Allotment of Federal Range enclosed and used in conjunction with your deeded property, as noted in the mandatory terms and conditions of your permit.
- Adjustments in livestock numbers or any other changes from your normal grazing schedule must be approved in advance by the authorized officer.
- You shall provide BLM with a completed actual use record within 15 days of the close of the grazing season.
- In accordance with ONDA v. Palma (Owyhee Wild and Scenic Rivers) civil no. 98-97-RE, regarding order of modified injunction, the areas of designated concern (Anderson Crossing and Upper West Little Owyhee River) within the Louse Canyon Community Allotment are closed to livestock grazing.
- Gap fences along the Upper West Little Owyhee south rim shall be maintained in accordance with your cooperative agreement to eliminate livestock use in the areas of concern.
- Trailing through any area of concern is restricted to three (3) hours per herd of livestock.
- Permittees shall maintain all range improvements. This has been, or will be, specified in signed cooperative agreements.
- Salt or supplements shall be placed at least ½ mile away from water sources and sage-grouse leks on public land.
- This permit is subject to modification as necessary to achieve compliance with the Standards for Rangeland Health and Guidelines for Livestock Management (43 CFR 4180).

Once all of the previously mentioned rangeland improvement projects have been constructed your standard grazing authorization, which is defined in the LCGMA Evaluation and Revised EA, for the Louse Canyon Community Allotment will be as follows:

Year 1

Allotment	Pasture	Use Period	Livestock # and Kind	AUMs
Louse Canyon Community	Wilkinson FFR	03/01 to 05/15	120 Cattle	300
		03/01 to 10/15	20 Horses	151
	Drummond Basin	03/01 to 05/10	658 Cattle	1,536
	Steer Canyon Native	05/11 to 05/25	658 Cattle	325
	Upper Louse Cyn.	05/16 to 05/25	120 Cattle	40
	Upper Louse Cyn.	05/26 to 07/31	250 Cattle	551
	Middle Louse Cyn.	05/26 to 07/15	528 Cattle	885
	Lower Louse Cyn.	07/16 to 07/31	528 Cattle	278
	Lower Louse Cyn.	08/01 to 08/31	778 Cattle	793
	Steer Cyn. Seeding	09/01 to 10/15	778 Cattle	1,151
	*FFR			192
* There are 192 AUMs of Fenced Federal Range included with private property.				
			Total	**6202**

Year 2

Allotment	Pasture	Use Period	Livestock # and Kind	AUMs
Louse Canyon Community	Wilkinson FFR	03/01 to 05/15	120 Cattle	300
		03/01 to 10/15	20 Horses	151
	Drummond	03/01 to 05/10	658 Cattle	1,536
	Steer Canyon Native	05/11 to 05/25	658 Cattle	325
	Upper Louse Cyn.	05/16 to 05/25	120 Cattle	40
	Upper Louse Cyn.	05/26 to 06/30	250 Cattle	296
	Middle Louse Cyn.	05/26 to 06/30	528 Cattle	625
	Middle Louse Cyn.	07/01 to 07/15	778 Cattle	384
	Lower Louse Cyn.	07/16 to 08/31	778 Cattle	1202
	Steer Cyn. Seeding	09/01 to 10/15	778 Cattle	1,151
	*FFR			192
* There are 192 AUMs of Fenced Federal Range in with your private property.				
			Total	**6202**

It is expected that livestock grazing in the Louse Canyon Community Allotment under the schedule and rotation system authorized by this final decision, and outlined above, will not be fully achievable until all of the rangeland improvement projects in this decision have been completed. As rangeland improvement projects are constructed and the preferred alternative moves closer to full implementation, your annual grazing authorization will approach that of this final decision in livestock numbers and length of grazing season. Until these projects are constructed, which allow for the protection of riparian areas that were not meeting the Standards

for Rangeland Health, your annual grazing authorization will be in accordance with the interim grazing strategy. In the interim, you must still manage your livestock to meet the utilization limits stated in this decision and meet other terms and conditions of this decision.

Funding has been identified as a priority for the full implementation of the preferred alternative, and construction of rangeland improvement projects is expected to begin this grazing season after the appropriate cultural and botanical surveys have been completed. All projects are expected to be completed and livestock grazing is expected to occur as described in this decision by the end of the 2006 grazing season.

Within the Louse Canyon Geographic Management Area, rangeland improvement projects will be constructed and grazing management conducted in accordance with the following mitigating measures which were identified in the Revised EA:

Rangeland Vegetation
Appendix S of the SEORMP ROD (Standard Implementation Features and Procedures for Rangeland Improvements) will be adhered to.

Special Status Plant Species
Special status plant surveys will be conducted prior to all surface disturbing activities and project installations. Project location adjustments necessary to avoid site specific adverse impacts to special status plants will be accommodated.

Water Resources and Riparian/Wetlands and Aquatic Species and Habitats
Project development in riparian/wetland areas will follow SEORMP ROD Appendix O (Best Management Practices) criteria to minimize disturbance and maximize potential for project success. Adequate buffer distances will be implemented to protect riparian areas and stream channels from potential erosional impacts of land treatments and construction of fences.

Wildlife and Wildlife Habitat and Special Status Animal Species
BLM will continue to monitor habitat conditions in LCGMA, and ODFW will continue to monitor sage-grouse population status. Existing rangeland vegetation monitoring will be supplemented with appropriate additional studies in accordance with SEORMP ROD Monitoring Appendix W to document success or failure in meeting LCGMA resource objectives.

The activity plan level wildlife habitat objective for LCGMA and the SEORMP ROD 70% threshold for grassland habitat in Jordan Resource Area (page *x* Record of Decision) will significantly limit the amount, type, and location of further fragmentation from BLM initiated land treatments. Less than 5% (26,000 acres) of the Wyoming, mountain, and Basin big sagebrush habitats may appear as grasslands under the LCGMA terrestrial wildlife objective.

BLM has obligated funds to survey for presence of pygmy rabbits before land treatment is initiated in Starvation Brush Control pasture. The survey will be completed by qualified contractors. Based on the information gathered BLM will then either avoid adverse impacts to pygmy rabbit habitat by adjusting the treatment boundary of the proposed project or proceed on the basis of field data that show pygmy rabbits do not occupy the proposed treatment area.

Land treatment will completed at least two to four miles from existing leks so that most potential adverse nesting habitat impacts may be avoided in accordance with OR/WA BLM and WAFWA management guidelines.

New livestock management fences will be located at least .6 miles from leks according to BLM and WAFWA management guidelines.

All new livestock water sources will be located more than .6 miles from leks to avoid potential livestock disturbances during the sage-grouse strutting season.

Livestock salting and mineral supplement stations will be placed at least ¼ mile from leks to avoid drawing livestock into centers of sage-grouse breeding activity.

Livestock trailing onto public land during turnout and among pastures between March 1st and April 30th will be routed in a manner that avoids direct overlap of livestock and sage-grouse breeding activities.

Livestock management fences will be constructed in a way that allows for freedom of movement for bighorn sheep, mule deer, and pronghorn and minimizes potential for injury or mortality. In accordance with BLM Manual Handbook H-1741-1, Interior allotment fences will conform to the following material and spacing requirements; top strand – barbed wire - no higher than 38", second strand – barbed wire at 26", bottom strand – smooth wire at 16".

New fencing will be flagged temporarily to help diminish incidence of wildlife and fence collisions.

Wildlife escape ramps will be installed in new and existing livestock water tanks to minimizing potential for sage-grouse and other small animal drowning mortalities.

Rangeland/Grazing Use Management
Appendix S of the SEORMP ROD (Standard Implementation Features and Procedures for Rangeland Improvements) will be adhered to.

Wilderness Study Areas
Impacts to WSA's will be mitigated to the extent possible by adherence to the BLM Wilderness Interim Management Policy. Careful selection of construction materials and methods (such as installation of easy panels and use of all green metal fence posts) and judicious placement intended to maximize vegetative and topographic screening will be practiced.

Cultural Resources
Cultural resource surveys will be conducted prior to all surface disturbing activities and project installations. Project location adjustments necessary to avoid site specific adverse impacts to cultural resources will be accommodated.

Adaptive Management, Monitoring Methods, and Potential Grazing Management Adjustments in LCGMA

BLM monitoring data shall determine if authorized grazing use in LCGMA results in attainment of the riparian management objectives, as described in the evaluation on pages 1 and 2 of Chapter 5, over short and long-term time frames as described below.

Short-term Performance Evaluations

The proposed grazing system adopted in this decision shall undergo an annual performance evaluation by BLM's IDT to determine if the short-term riparian management objectives for LCGMA are being met. Prior to the 2015 expiration date of your new term grazing permit, a long-term evaluation of grazing system performance and effects on riparian and wetland areas will be conducted. The annual short-term evaluation schedule will begin in Fall/Winter of 2005.

Monitoring methods used to make these short-term performance determinations will include incidence of livestock use studies on key woody riparian plant species (e.g. Cole Browse studies) and ground-based photo points. Both methods are approved BLM procedures appropriate for monitoring riparian areas and provide good indications of riparian function and health.

Key monitoring sites considered representative of LCGMA riparian and wetland areas will be selected by the IDT with the full knowledge and cooperation of affected livestock permittees.

BLM will conclude that short-term riparian objectives for LCGMA are being met annually when the following are demonstrated with monitoring data:

(1) Cole Browse incidence of use studies show that no more than 30% of woody riparian plant stems available to livestock are actually browsed by cattle during the grazing period.

(2) Photo points show that re-growth of herbaceous plants has occurred, where there is perennial water present, after the removal of livestock grazing use. This will be determined by fall of each grazing season and before the onset of winter conditions. If the short-term herbaceous plant re-growth expectation is being met, grazing use in the following year will proceed as authorized by this decision. If the short-term herbaceous plant re-growth expectation is not being met due to authorized livestock use, BLM shall consider further adjustments to the Proposed Action before the beginning of the next grazing season in accordance with 43 CFR 4180 and the Adaptive Management principles outlined in the SEORMP ROD.

Potential grazing use adjustments that may be necessary because of failure to meet herbaceous re-growth requirements may include measures such as re-routing livestock trailing or further adjustments in the duration or intensity of livestock grazing use. BLM will consider other potential remedies that may not be foreseeable at this time if further management action is needed to make significant progress toward attainment of failed standards as a result of authorized livestock use.

Long-term Performance Evaluation

A long-term performance evaluation of this grazing system and its effects on riparian areas shall be completed by the IDT prior to the 2015 expiration date of your new term grazing permit. Monitoring methods shall be in accordance with approved BLM protocols identified in Appendix W of the SEORMP ROD.

Long-term proper functioning condition (PFC) determinations will be made on the basis of actual field monitoring data from this time forward. A reassessment of PFC conditions will not be a part of the long-term evaluation determination.

Where improvement of riparian condition is needed, upward trend indicators demonstrating that the grazing system is working properly will include items such as: increases in the overall amount of herbaceous ground cover; increases in the amount of herbaceous plants indicative of later ecological conditions; and decreases in the amount of active stream-bank erosion. Where site potential allows for woody riparian vegetation the following indicators will be used to assess upward trend: increases in the total number of key woody plants, evidence of woody plant reproduction that is not being completely suppressed by the effects of livestock grazing use; and increases in overall canopy volume (height and width) of key woody plants.

RATIONALE

Under the direction of the SEORMP, GMA assessments are an administrative mechanism by which BLM will make adjustments to authorized land uses. Based on the LCGMA rangeland assessment findings of 2001, changes in livestock use are needed in LCGMA grazing allotments in order to resolve certain resource management conflicts. The rationale for this decision is based on the Oregon/Washington Standards of Rangeland Health Determinations for pastures within the Louse Canyon Community Allotment. These determinations are published in the Louse Canyon Geographic Management Area Standards of Rangeland Health Evaluation, Chapter 3.

Where existing grazing management practices on public lands are significant factors in failing to achieve the standards for rangeland health and conform to the guidelines, BLM is taking action with this final decision to move toward the attainment of standards.

The Louse Canyon Pasture of the Louse Canyon Community Allotment does not meet Standard 2 (watershed function, riparian) and current grazing management is a significant factor. This pasture contains numerous riparian/wetland areas. Riparian conditions observed on portions of Pole Creek, Jack Creek, Deer Creek, Massey Canyon, Dry Canyon, and 23 spring/meadow areas were not sufficient to dissipate stream energy, reduce erosion, or store water for later release. These habitats are adversely affected by livestock grazing, which has reduced plant cover and compacted wet soils.

The Louse Canyon Pasture does not meet Standard 4 (water quality) and current grazing management is a significant factor. This Pasture has several intermittently flowing interrupted stream systems. Many reaches are dry by July except for springs, potholes scoured out of the alluvium, and wet areas where water resurfaces. Numerous channels are incised, with denuded stream banks or with discontinuous, dissected sedge/rush mats bordering the channel due to historic authorized livestock use that have occurred late into the growing season. This historic grazing use did not allow for healthy riparian conditions and resulted in accelerated erosion in

these areas. Many riparian areas were rated Functioning-at-Risk and these could contribute to the impairment of water quality in the pasture. Spring sources, scour pools, wet areas, and riparian vegetation in this pasture are well utilized by livestock and lack the proper physical and biological characteristics to properly function and aid in the maintenance for water quality.

The Louse Canyon Pasture also does not meet Standard 5 (native, T&E, or locally important species) for riparian and current grazing management practices are a significant factor. Based on assessments for Standard 2 (watershed function, riparian) the riparian conditions observed on portions of Pole Creek, Jack Creek, Deer Creek, and Massey Canyon and 18 spring areas were not sufficient to dissipate stream energy, reduce erosion, store water for later release, or provide rearing and foraging areas for fish, amphibians, and invertebrates. These habitats were adversely affected by livestock grazing use, which reduced plant cover and compacted wet soils.

The Steer Canyon (Rawhide) Seeding Pasture of the Louse Canyon Community Allotment does not meet Standard 2 (watershed function, riparian) and current grazing management is a significant factor. Field Creek in this seeding is intermittent and the channel lies within a continuous sedge/rush mat that is dissected into gravel and cobble substrates. Two perennial spring areas provide localized but limited water. The upper reaches of Field Creek (4.8 mi) were rated Functioning at Risk-Trend Not Apparent based on the presence of scour areas, discontinuous plant cover, downcutting, and lack of point bar revegetation. Current and historic livestock grazing use are contributing factors to existing conditions.

The Steer Canyon Seeding does not meet Standard 4 (water quality) and current grazing management is a significant factor. A short segment of Field Creek (4.2 mi.) flows through Steer Canyon Seeding. This creek is an intermittently flowing interrupted stream system that dries by July except for areas around the Brown Place and another spring. The Standard 2 Functioning-at-Risk assessment rating for physical stream channel and floodplain properties contributes to impairment of water quality in this area of Field Creek. The spring sources, wet areas, and riparian vegetation are well utilized by livestock and lack the proper characteristics to function and aid in the maintenance for water quality.

The Steer Canyon Seeding also does not meet Standard 5(native, T&E, or locally important species) for riparian and current grazing management is a significant factor. Field Creek has few perennial pools and low potential for fish habitat, although at least one fish species traverses it during runoff and may persist later in isolated pools. Field Creek provides breeding sites for Pacific treefrogs and possibly other amphibians. Though water is limiting, trampling and utilization from grazing lowers the quality and extent of aquatic habitat.

The projects that have been proposed in the preferred alternative of the evaluation and Revised EA were designed to allow the Louse Canyon Pasture and Steer Canyon Seeding Pasture in the Louse Canyon Community Allotment to make significant progress toward attainment of the standards that were not met. This will be accomplished by constructing new rangeland improvement projects that will allow for a new grazing system to be implemented. The new grazing system will schedule grazing use in pastures with unprotected riparian areas earlier in the season so that vegetative regrowth will occur after use, thereby allowing for significant progress to be made toward attainment of failed standards.

The main problem with existing grazing management in LCGMA is that riparian areas are not being managed to allow for late summer or fall regrowth of vegetation that is adequate to promote properly functioning riparian systems. The assessments that were conducted and the determinations made in 2001 found that upland conditions in LCGMA, as a whole, are in a healthy condition, function properly, and meet standards for rangeland health. All action taken by this final decision is to maintain quality upland conditions and improve riparian health and function.

This final decision will implement the preferred alternative where the Louse Canyon Pasture will be divided into three different pastures, the Upper Louse Canyon Pasture, the Middle Louse Canyon Pasture, and the Lower Louse Canyon Pasture. This final decision also will allow for fencing to divide the Steer Canyon (Rawhide) Seeding into two different pastures, the Steer Canyon Native Pasture, and the Steer Canyon Seeding Pasture. This fencing allows for the inclusion of many riparian areas that were not meeting standards to be contained by a physical boundary, and the new pastures managed to improve conditions where standards were not met.

The Middle and Upper Louse Canyon Pastures contain many of the areas where grazing management was a significant factor in failing to meet some standards. By constructing new fencing to isolate these new pastures and scheduling them for use prior to July 15 and July 31, respectively, adequate soil moisture will likely remain to achieve riparian vegetative regrowth. This regrowth will allow these areas to begin to function properly by increasing their resilience and water storage capabilities based on results observed on BLM public lands in the nearby Trout Creek Mountains. The additional plant material expected in these areas will allow for increased sediment capture and roots will aid in soil stabilization.

The purpose for the fencing in the Steer Canyon Seeding Pasture is to allow the Steer Canyon Native Pasture, which is where the riparian areas that were not meeting standards are, to be grazed earlier in the grazing season. Using this new pasture at the proposed time will allow vegetative regrowth to occur along Field Creek. The riparian areas in this pasture should respond the same as the ones in the Upper and Middle Louse Canyon Pastures.

Riparian areas that were found to not meet standards in the newly formed Lower Louse Canyon Pasture, such as along Pole Creek and Four Springs, will be protected from the grazing use that is scheduled from July 16 to August 31 by riparian exclosure fencing. This fencing will allow for areas such as these to be excluded from grazing use and begin functioning properly as their water storage and sediment capture capabilities increase.

Spring renovation will occur on 13 springs in the Louse Canyon Community Allotment. These efforts will allow the riparian areas associated with springs to make significant progress toward attaining standards. Many of these springs had developed water sources such as troughs located in the riparian meadows. Livestock use allowed these areas to become trampled and compacted which did not allow them to function properly. Many of these springs will have the troughs moved out of the riparian areas. This combined with changes to the permitted season of use will allow these areas to significantly improve.

The Steer Canyon Seeding Pasture, which under the existing authorization is used earlier in the grazing season, will now be used as the last pasture in the grazing system. This is because it will

lack any riparian areas and using it at the end of the grazing season will not harm this pasture or cause it to not meet standards.

AUTHORITY

The authority for this decision is contained in Title 43 of the Code of Federal Regulations (CFR) including, but not limited to the following:

4100.0-2 Objectives.
The objectives of these regulations are to promote healthy sustainable rangeland ecosystems; to accelerate restoration and improvement of public rangelands to properly functioning conditions; to promote the orderly use, improvement and development of the public lands; to establish efficient and effective administration of grazing of public rangelands; and to provide for the sustainability of the western livestock industry and communities that are dependent upon productive, healthy public rangelands. These objectives shall be realized in a manner that is consistent with land use plans, multiple use, sustained yield, environmental values, economic and other objectives stated in 43 CFR part 1720, subpart 1725; the Taylor Grazing Act of June 28, 1934, as amended (43 U.S.C. 315, 315a-315r); section 102 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1740).

§4100.0-3 Authority.
(a) The Taylor Grazing Act of June 28, 1934 as amended (43 U.S.C. 315, 315a through 315r);
(b) The Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) as amended by the Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.);
(c) Executive orders transfer land acquired under the Bankhead-Jones Farm Tenant Act of July 22, 1937, as amended (7 U.S.C. 1012), to the Secretary and authorize administration under the Taylor Grazing Act.
(d) Section 4 of the O&C Act of August 28, 1937 (43 U.S.C. 118(d));
(e) The Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); and
(f) Public land orders, Executive orders, and agreements authorize the Secretary to administer livestock grazing on specified lands under the Taylor Grazing Act or other authority as specified.

§4100.0-8 Land use plans.
The authorized officer shall manage livestock grazing on public lands under the principle of multiple use and sustained yield, and in accordance with applicable land use plans. Land use plans shall establish allowable resource uses (either singly or in combination), related levels of production or use to be maintained, areas of use, and resource condition goals and objectives to be obtained. 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 as defined at 43 CFR 1601.0-5(b).

§4110.2-4 Allotments.
After consultation, cooperation, and coordination with the affected grazing permittees or lessees, the State having lands or responsible for managing resources within the area, and the interested public, the authorized officer may designate and adjust grazing allotment boundaries. The

authorized officer may combine or divide allotments, through an agreement or by decision, when necessary for the proper and efficient management of public rangelands.

§4110.3 Changes in permitted use.
The authorized officer shall periodically review the permitted use specified in a grazing permit or lease and shall make changes in the permitted use as needed to manage, maintain or improve rangeland productivity, to assist in restoring ecosystems to properly functioning condition, to conform with land use plans or activity plans, or to comply with the provisions of subpart 4180 of this part. These changes must be supported by monitoring, field observations, ecological site inventory or other data acceptable to the authorized officer.

§4120.2 Allotment management plans and resource activity plans.
Allotment management plans or other activity plans intended to serve as the functional equivalent of allotment management plans may be developed by permittees or lessees, other Federal or State resource management agencies, interested citizens, and the Bureau of Land Management. When such plans affecting the administration of grazing allotments are developed, the following provisions apply:

(a) An allotment management plan or other activity plans intended to serve as the functional equivalent of allotment management plans shall be prepared in careful and considered consultation, cooperation, and coordination with affected permittees or lessees, landowners involved, the resource advisory council, any State having lands or responsible for managing resources within the area to be covered by such a plan, and the interested public. The plan shall become effective upon approval by the authorized officer. The plans shall --
  (1) Include terms and conditions under §§4130.3, 4130.3-1, 4130.3-2 4130.3-3, and subpart 4180 of this part;
  (2) Prescribe the livestock grazing practices necessary to meet specific resource objectives;
  (4) Provide for monitoring to evaluate the effectiveness of management actions in achieving the specific resource objectives of the plan.

(c) The authorized officer shall provide opportunity for public participation in the planning and environmental analysis of proposed plans affecting the administration of grazing and shall give public notice concerning the availability of environmental documents prepared as a part of the development of such plans, prior to implementing the plans. The decision document following the environmental analysis shall be considered the proposed decision for the purposes of subpart 4160 of this part.

(d) A requirement to conform with completed allotment management plans or other applicable activity plans intended to serve as the functional equivalent of allotment management plans shall be incorporated into the terms and conditions of the grazing permit or lease for the allotment.

(e) Allotment management plans or other applicable activity plans intended to serve as the functional equivalent of allotment management plans may be revised or terminated by the authorized officer after consultation, cooperation, and coordination with the affected permittees or lessees, landowners involved, the resource advisory council, any State having lands or responsible for managing resources within the area to be covered by the plan, and the interested public.

§4120.3-1 Conditions for range improvements.

(a) Range improvements shall be installed, used, maintained, and/or modified on the public lands, or removed from these lands, in a manner consistent with multiple-use management.

(b) Prior to installing, using, maintaining, and/or modifying range improvements on the public lands, permittees or lessees shall have entered into a cooperative range improvement agreement with the Bureau of Land Management or must have an approved range improvement permit.

(d) The authorized officer may require a permittee or lessee to install range improvements on the public lands in an allotment with two or more permittees or lessees and/or to meet the terms and conditions of agreement.

(e) A range improvement permit or cooperative range improvement agreement does not convey to the permittee or cooperator any right, title, or interest in any lands or resources held by the United States.

(f) Proposed range improvement projects shall be reviewed in accordance with the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. 4371 et seq.). The decision document following the environmental analysis shall be considered the proposed decision under subpart 4160 of this part.

§4130.2 Grazing permits or leases.

(a) Grazing permits or leases shall be issued to qualified applicants to authorize use on the public lands and other lands under the administration of the Bureau of Land Management that are designated as available for livestock grazing through land use plans. Permits or leases shall specify the types and levels of use authorized, including livestock grazing, suspended use, and conservation use. These grazing permits and leases shall also specify terms and conditions pursuant to §§4130.3, 4130.3-1, and 4130.3-2.

(b) The authorized officer shall consult, cooperate and coordinate with affected permittees or lessees, the State having lands or responsible for managing resources within the area, and the interested public prior to the issuance or renewal of grazing permits and leases.

(c) Grazing permits or leases convey no right, title, or interest held by the United States in any lands or resources.

(d) The term of grazing permits or leases authorizing livestock grazing on the public lands and other lands under the administration of the Bureau of Land Management shall be 10 years

§4130.3 Terms and conditions.

Livestock grazing permits and leases shall contain terms and conditions determined by the authorized officer to be appropriate to achieve management and resource condition objectives for the public lands and other lands administered by the Bureau of Land Management, and to ensure conformance with the provisions of subpart 4180 of this part.

§4130.3-1 Mandatory terms and conditions.

(a) The authorized officer shall specify the kind and number of livestock, the period(s) of use, the allotment(s) to be used, and the amount of use, in animal unit months, for every grazing permit or lease. The authorized livestock grazing use shall not exceed the livestock carrying capacity of the allotment.

(b) All permits and leases shall be made subject to cancellation, suspension, or modification for any violation of these regulations or of any term or condition of the permit or lease.

(c) Permits and leases shall incorporate terms and conditions that ensure conformance with subpart 4180 of this part.

§4130.3-2 Other terms and conditions.
The authorized officer may specify in grazing permits or leases other terms and conditions which will assist in achieving management objectives, provide for proper range management or assist in the orderly administration of the public rangelands. These may include but are not limited to:

(a) The class of livestock that will graze on an allotment;

(c) Authorization to use, and directions for placement of supplemental feed, including salt, for improved livestock and rangeland management on the public lands;

§4130.3-3 Modification of permits or leases.
Following consultation, cooperation, and coordination with the affected lessees or permittees, the State having lands or responsible for managing resources within the area, and the interested public, the authorized officer may modify terms and conditions of the permit or lease when the active use or related management practices are not meeting the land use plan, allotment management plan or other activity plan, or management objectives, or is not in conformance with the provisions of subpart 4180 of this part. To the extent practical, the authorized officer shall provide to affected permittees or lessees, States having lands or responsibility for managing resources within the affected area, and the interested public an opportunity to review, comment and give input during the preparation of reports that evaluate monitoring and other data that are used as a basis for making decisions to increase or decrease grazing use, or to change the terms and conditions of a permit or lease.

§4160.3 Final decisions.

(b) Upon the timely filing of a protest, the authorized officer shall reconsider her/his proposed decision in light of the protestant's statement of reasons for protest and in light of other information pertinent to the case. At the conclusion to her/his review of the protest, the authorized officer shall serve her/his final decision on the protestant or her/his agent, or both, and the interested public.

(c) A period of 30 days following receipt of the final decision, or 30 days after the date the proposed decision becomes final as provided in paragraph (a) of this section, is provided for filing an appeal and petition for stay of the decision pending final determination on appeal. A decision will not be effective during the 30-day appeal period, except as provided in paragraph (f) of this section. See §§4.21 and 4.470 of this title for general provisions of the appeal and stay processes.

(d) When the Office of Hearings and Appeals stays a final decision of the authorized officer regarding an application for grazing authorization, an applicant who was granted grazing use in the preceding year may continue at that level of authorized grazing use during the time the decision is stayed, except where grazing use in the preceding year was authorized on a temporary basis under §4110.3–1(a). Where an applicant had no authorized grazing use during the previous year, or the application is for designated ephemeral or annual rangeland grazing use, the authorized grazing use shall be consistent with the final decision pending the Office of Hearings and Appeals final determination on the appeal.

(e) When the Office of Hearings and Appeals stays a final decision of the authorized officer to change the authorized grazing use, the grazing use authorized to the permittee or lessee during the time that the decision is stayed shall not exceed the permittee's or lessee's authorized use in the last year during which any use was authorized.

(f) Notwithstanding the provisions of §4.21(a) of this title pertaining to the period during which a final decision will not be in effect, the authorized officer may provide that the final decision shall be effective upon issuance or on a date established in the decision and shall remain in effect pending the decision on appeal unless a stay is granted by the Office of Hearings and Appeals when the authorized officer has made a determination in accordance with §4110.3–3(b) or §4150.2(d). Nothing in this section shall affect the authority of the Director of the Office of Hearings and Appeals or the Interior Board of Land Appeals to place decisions in full force and effect as provided in §4.21(a)(1) of this title.

§4160.4 Appeals
Any person whose interest is adversely affected by a final decision of the authorized officer may appeal the decision for the purpose of a hearing before an administrative law judge by following the requirements set out in §4.470 of this title. As stated in that part, the appeal must be filed within 30 days after receipt of the final decision or within 30 days after the date the proposed decision becomes final as provided in §4160.3(a). Appeals and petitions for a stay of the decision shall be filed at the office of the authorized officer. The authorized officer shall promptly transmit the appeal and petition for stay and the accompanying administrative record to ensure their timely arrival at the Office of Hearings and Appeals.

§4180.1 Fundamentals of rangeland health.
The authorized officer shall take appropriate action under subparts 4110, 4120, 4130, and 4160 of this part as soon as practicable but not later than the start of the next grazing year upon determining that existing grazing management needs to be modified to ensure that the following conditions exist.

(a) Watersheds are in, or are making significant progress toward, properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage, and the release of water that are in balance with climate and landform and maintain or improve water quality, water quantity, and timing and duration of flow.
(b) Ecological processes, including the hydrologic cycle, nutrient cycle, and energy flow, are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.
(c) Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving, established BLM management objectives such as meeting wildlife needs.
(d) Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species.

§4180.2 Standards and guidelines for grazing administration.

(c) The authorized officer shall take appropriate action as soon as practicable but not later than the start of the next grazing year upon determining that existing grazing management practices or levels of grazing use on public lands are significant factors in failing to achieve the standards and conform with the guidelines that are made effective under this section. Appropriate action means implementing actions pursuant to subparts 4110, 4120, 4130, and 4160 of this part that will result in significant progress toward fulfillment of the standards and significant progress toward conformance with the guidelines. Practices and activities subject to standards and guidelines include the development of grazing-related portions of activity plans, establishment of terms and conditions of permits, leases and other grazing authorizations, and range improvement activities such as vegetation manipulation, fence construction and development of water.

(e) At a minimum, State or regional guidelines developed under paragraphs (a) and (b) of this section must address the following:

(1) Maintaining or promoting adequate amounts of vegetative ground cover, including standing plant material and litter, to support infiltration, maintain soil moisture storage, and stabilize soils;

(2) Maintaining or promoting subsurface soil conditions that support permeability rates appropriate to climate and soils;

(3) Maintaining, improving or restoring riparian-wetland functions including energy dissipation, sediment capture, groundwater recharge, and stream bank stability;

(4) Maintaining or promoting stream channel morphology (e.g., gradient, width/depth ratio, channel roughness and sinuosity) and functions appropriate to climate and landform;

(5) Maintaining or promoting the appropriate kinds and amounts of soil organisms, plants and animals to support the hydrologic cycle, nutrient cycle, and energy flow;

(6) Promoting the opportunity for seedling establishment of appropriate plant species when climatic conditions and space allow;

(7) Maintaining, restoring or enhancing water quality to meet management objectives, such as meeting wildlife needs;

(8) Restoring, maintaining or enhancing habitats to assist in the recovery of Federal threatened and endangered species;

(9) Restoring, maintaining or enhancing habitats of Federal Proposed, Category 1 and 2 Federal candidate, and other special status species to promote their conservation;

(10) Maintaining or promoting the physical and biological conditions to sustain native populations and communities;

(11) Emphasizing native species in the support of ecological function;

Southeastern Oregon Resource Management Plan, Record of Decision and Final Environmental Impact Statement, September 2002.

RIGHT OF APPEAL

Any applicant, permittee, lessee or other person whose interest is adversely affected by the final decision may file an appeal in accordance with 43 CFR 4.470 and 43 CFR 4160.3 and 4160 .4. The appeal must be filed within 30 days following receipt of the final decision. The appeal may be accompanied by a petition for a stay of the decision in accordance with 43 CFR 4.471 and 4.479, pending final determination on appeal. The appeal and petition for a stay must be filed in the office of the authorized officer and addressed as follows:

Wayne A. Wetzel
Jordan Field Manager
Vale District Bureau of Land Management
100 Oregon Street
Vale, Oregon 97918

The appeal shall state the reasons, clearly and concisely, why the appellant thinks the final decision is in error and otherwise complies with the provisions of 43 CFR 4.470. The appellant must serve a copy of the appeal by certified mail on the Office of the Solicitor addressed as follows:

Office of the Solicitor
US Department of the Interior
Pacific NW Region
500 NE Multnomah, Suite 607
Portland, OR 97213

and person(s) named [43 CFR 4.421(h)] in the *Copies sent to:* section of this decision.

Should you, or any person whose interest is adversely affected, wish to file a petition for a stay see 43 CFR 4.471 (a) and (b). In accordance with 43 CFR 4.471(c), a petition for a stay must show sufficient justification based on the following standards:

(1) The relative harm to the parties if the stay is granted or denied.
(2) The likelihood of the appellant's success on the merits.
(3) The likelihood of immediate and irreparable harm if the stay is not granted, and
(4) Whether the public interest favors granting the stay.

As noted above, the petition for stay must be filed in the office of the authorized officer and served in accordance with 43 CFR 4.473.

Any person named in the decision that receives a copy of a petition for a stay and/or an appeal see 43 CFR 4.472(b) for procedures to follow if you wish to respond.

If you have any questions, feel free to contact either Travis Fletcher at (541) 473-6276, or myself at (541) 473-3144.

Sincerely,

Wayne A. Wetzel

Wayne A. Wetzel
Jordan Field Manager