OFFICE OF HEARINGS AND APPEALS
BOARD OF LAND APPEALS

Western Watersheds Project
APPELLANT

Notice of Appeal, Statement of Reasons, and Petition for Stay for:

EA NV-040-07-21, Jared Cornelius permit for Highland Peak allotment 11/21/07 Decision
EA NV-040-07-020, Raymond Thomas permit, Comet allotment. 11/23/07 Decision
EA NV-040-07-22, for George Andrus permit, Oak Wells allotment. 11/21/07
EA NV-040-06-044, Wahoo Ranch permit (SNWA) for Willard Creek allotment 11/30/07 Decision
EA NV-040-06-045, John Baal permit for Willard Creek allotment 12/3/07 Decision
EA NV-040-06-015, White River Ranch LLC permit, for Tom Plain and McQueen Flat allotments 11/20/07 Decision
EA NV-040-07-21, Bradley Guymon permit, for Bennett Spring, Black Canyon, Klondike, Highland Peak allotments 11/23/07 Decision
EA NV-040-07-21, Bradley Guymon, Jared Corneiius, Tom Williams permits, Bennett Spring, Black Canyon, Klondike, Highland Peak allotments 11/23/07 Decision
EA NV-040-06-043 Dean Carter permit, North Chokecherry allotment 11/20/07 Decision
EA NV-040-07-017, Laird Whipple permit, Ely Spring Cattle and Ely Spring Sheep allotments 11/23/07 Decision
EA NV-045-06-52, Tempiute Grazing Association permit, Sand Springs allotment, 11/21/07 Decision
EA NV-040-07-019, Todd and Kathy Wright permit, Pioche allotment. 11/30/07 Decision
EA NV-040-06-046 R. W. D. Currant permit, Duckwater allotment, 10/29/07 Decision
EA NV-040-06-040 Bradshaw Ranch permit, Duckwater allotment. 11/23/07 Decision.
Dean Carter and Sons permit, Rattlesnake Allotment 11/30/07
Pleasant Valley Enterprises c/o Gail Norman, Mallory Springs Allotment, 11/30/07
James Tallerico permit, Bennett Creek allotment, 11/30/07
EA NV-040-06-23 William E. Hayward and William J. Hayward Term Permit Renewal for the Georgetown allotment, 11/07

Vs.

Kyle V. Hansen
Ely Field Office Acting Manager replacing William Dunn
RESPONDENT

NOTICE OF APPEAL

STATEMENT OF REASONS

REQUEST FOR RELIEF

PETITION FOR STAY

Dated this _21_ day of December, 2007

Katie Fite
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NOTICE OF APPEAL

Pursuant to 43 C.F.R. Part 4, this is an Appeal and Petition for Stay of EA, FONSI, and Notice of Final Decision for Allotments within the Ely Field Office.

This appeal is pursuant to all applicable authority, including the Federal Land Policy and Management Act, 43 U.S.C. §§ 1701–1782, and the Bureau of Land Management's (BLM) implementing regulations.

Appellant will demonstrate that the Field Office Manager's decision is arbitrary and capricious and in error and not in accordance with the legal requirements of the Federal Land Policy and Management Act (FLPMA), the National Environmental Policy Act (NEPA), and the Administrative Procedures Act (APA), and other laws and regulations as stated in the Statement of Reasons. Consequently, Appellant requests that the Decision be withdrawn and additional environmental analysis and alternatives be prepared to address the issues contained in this appeal and a comprehensive and effective environmental impact statement (EIS) be drafted that will effectively fulfill the legal requirements under which the BLM operates and that discloses the environmental impacts associated with grazing the allotments.

THE APPELLANT

WWP is a regional 501c3 non-profit conservation organization with over 1,300 members based in Hailey, Idaho with offices in Idaho, California, Montana, Wyoming and Utah. WWP and its members have a strong interest in the management of public lands in Idaho and Nevada, including BLM lands in the Ely Field Office. We have a particular interest in the allotments to which this EA pertains for the wide variety of topography, habitat for rare, sensitive and declining species such as sage grouse, pygmy rabbits, ferruginous hawk, burrowing owls, and sage sparrows, among others and deer, elk, pronghorn, migratory birds, raptors and others. As such, WWP and our members will be adversely affected by this decision.

WWP has taken part as an Interested Public in the management of the Ely Field Office (EFO) for many years and has taken part in every aspect of the development of the NEPA process in question. We include by reference in this appeal our entire comments on the EA as well as our comments on the Draft Environmental Impact Statement for the Resource Management Plan (RMP) including all appendices, all of which are available in the administrative record.

WWP claims partial ownership in the public lands covered by this decision and consequently has legal standing to participate in the process and challenge those decisions it finds unacceptable.

The decision to implement this decision and authorize the renewal of domestic livestock grazing permits on the allotments significantly affects the appellant for the reason that the appellant is a conservation group whose members regularly engage in diverse forms of recreation and in other uses on the Ely Field Office. The proposed action will continue to degrade critical wildlife habitat, cause sensitive species declines and adversely affect our members' recreational use and enjoyment of the area. The decision and its action will

cause continued habitat alteration well beyond the lifespan of any of our members and irreparable irreversible ecological damage. Wildlife, recreational, economic, and intrinsic values will be diminished.

BACKGROUND

In short, this project seeks to renew grazing permits on BLM public clands, but fails to address continuing degradation from current livestock grazing practices and failures to meet natural resource standards on the allotments. Moreover, the EA and approved action fail to ensure that the allotments will meet or make "significant" progress towards meeting the Standards for Rangeland Health (SRH).

The Ely BLM lands provide habitat for a variety of sensitive species including greater sage grouse, pygmy rabbits, loggerhead shrikes, pinyon jay, ferruginous hawks, burrowing owls, sage thrashers, Brewer's sparrows, sage sparrows, and aquatic species.

Nevada BLM continually fails to disclose the impacts of domestic livestock grazing and associated activities such as this one in numerous EAs across the state that have the potential to affect millions of acres of public lands and the species that depend upon those lands. It is critical that the BLM does not use improper, unsupportable, and or insufficient data in its NEPA documents and its own FLPMA regulations and direction in the renewal of grazing permits and the development of range "improvements." The impacts of the BLM cutting such corners will affect millions of acres for generations and could push already sensitive species towards listing under the Endangered Species Act.

The BLM MUST be held accountable to its public trust responsibilities and comply fully with NEPA, disclosing ALL direct, indirect, and cumulative impacts. The public deserves such disclosure; congress has mandated that such disclosure occur, and only through such disclosure can the BLM be aware of whether or not it is meeting its obligations to protect public resources in a manner compatible with the Multiple Use Sustained Yield Act (MUSYA), FLPMA, The Taylor Grazing Act, and other laws and regulations that govern the management of public lands.

Furthermore, in order for the BLM to meet it's FLPMA mandate and Sensitive Species direction to protect sage grouse, pygmy rabbits, and other species, the most important and effective place to take the needed actions is at the allotment level. Projects such as this one, aimed at renewing livestock grazing permits in compliance with the Standards for Rangeland Health are the place to make these needed changes. BLM must comply with requirements of its Land Use Plan.

The BLM argues, without any support, that the effects of this proposal are not significant and in fact may be beneficial to the land and species on these allotments, even though the

BLM has failed in each circumstance to give even a cursory glance to the habitat requirements and needs of these species or the impacts on these species that occur as a direct, indirect, and/or cumulative effect from livestock grazing. If the BLM is allowed to skirt its obligation to comply with federal mandates as it has been doing, and as it most likely will continue to do without some correction, then none of the needed management changes for sensitive species and other resources will be made over larger areas, and the cumulative effects of that action need to be disclosed. So far, the BLM has continued to ignore this mandate. This failure to take action and acknowledge effects pushes sensitive species closer to listing, in violation of the ESA.

The BLM's final decision falls short of statutory and regulatory requirements by failing to analyze an adequate range of alternatives to the proposed action and by not adequately considering the direct, indirect and cumulative impacts of the proposed action. These impacts were not discussed in the DEIS for the RMP, and since significant changes in the populations of numerous sensitive species, resource conditions, and scientific understanding have occurred since the development of the RMP, the BLM cannot rely on the EIS for the RMP for disclosure of those impacts and at the same time meet NEPA's requirement for scientific and professional integrity.

Moreover, the BLM has failed to ensure that the proposed action will allow the allotments to meet to make significant progress toward meeting or continue to meet the SRH.

Despite its own acknowledgment that livestock grazing practices have severely affected the lands, and that there are a broad array of ecological problems, and that the Fundamentals of Rangeland Health are being violated, BLM's Decision facilitates increased actual use by livestock and extended periods of livestock use, plus constructs or continues livestock infrastructure to make that increased grazing use possible. BLM never analyzed any alternative that would have reduced livestock numbers below the level of average actual use, to levels necessary to protect the health of the soils, native biota including special status species, riparian areas, and recreational, cultural and other important or unique values of these lands. BLM's Decision authorizes active livestock use in excess of levels actually grazed over the past years.

Cumulative impacts of highly abusive livestock grazing practices across Ely lands, including severe depletion of upland and riparian areas and soils and microbiotic crusts are destroying the very values for which WWP's members hold in high regard.

This decision adversely affects WWP and its members who use these public lands. WWP will be negatively impacted by the renewal of these permits because it allows the continuation of unsustainable levels of grazing. Renewal of these permits will adversely impact wildlife habitat, soil and water resources, and native plant species. Finally, the decision will negatively impact recreational uses and enjoyment of these and other public lands because of these increased ecological harms.

Instead of acting to protect these lands, BLM's current Decision sacrifices them to the public lands livestock industry. BLM's Decision is designed to placate the livestock

industry in total disregard for the significant landscapes, plant communities, species, and associated values that livestock grazing is destroying here in violation of NEPA, FLPMA, and other statues and regulations.

I. The Proposed Action Violates FLPMA

A. The Approved Action Does Not Ensure That the Standards for Rangeland Health (SRH) Will Be Met or That the Action Will Result in Significant Progress towards Meeting the SRH in Violation of FLPMA

43 CFR § 4180.2 Standards and guidelines for grazing administration states the following:

> (c)(1) If a standards assessment indicates to the authorized officer that the rangeland is failing to achieve standards or that management practices do not conform to the guidelines, then the authorized officer will use monitoring data to identify the significant factors that contribute to failing to achieve the standards or to conform to the guidelines. If the authorized officer determines through standards assessment and monitoring 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, the authorized officer will, in compliance with applicable laws and with the consultation requirements of this part, formulate, propose, and analyze appropriate action to address the failure to meet standards or to conform to the guidelines.
>
> (3) The authorized officer will take appropriate action as defined in this paragraph by the deadlines established in paragraphs (c)(1) and (c)(2) of 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. (Emphasis added).

EA No. NV-040-07-21 states that Standard 1, relating to soils, on the Black Canyon and Klondike Allotments is not being achieved, but also claims that livestock are not a causal factor (EA p. 3). It further notes that Standard 3, for Habitat and Biota, are not being

met on the Highland Peak Allotment, but again the EA does not attribute this to livestock grazing (EA p. 4).

EA No. NV-040-01-019 notes that Standard 2: Ecosystem Components and Standard 3: Habitat and Biota are not being met on the Pioche Allotment, and states that livestock are not the contributing factor. (EA p. 2-3).

EA No. NV-040-07-017 that standards 1, 2, and 3 for the Ely Spring Cattle allotment are not being met, but this attributed to "historical" grazing practices (EA p. 3). The EA fails to state what exactly "historical" use was, is, or how this was determined.

EA No. NV-040-06-040 for the Duckwater Allotment seeks to renew grazing on the Duckwater Allotment which has not been grazed since 1998. Yet, this allotment does not meet Standard 2 for riparian indicators (Final Decision p. 2). EA No. NV-040-06-046, which is another EA for the Duckwater Allotment as well as the Currant Ranch Allotment notes that Standards 2 and 3 for these allotments is not being met (Final Decision p.2) again the BLM is blaming this failure on a lack of grasses and forbs in the understory and "too many shrubs" (Final Decision p. 3). Realistically, standards 1, 2, AND 3 are not being met on this allotment, but since the BLM segmented this action, in violation of NEPA this is not acknowledged by the BLM.

EA No. NV-040-07-22 for the Oak Wells Allotment states that standard 3: Habitat and Biota are not being achieved, yet claims that livestock are not a contributing factor, instead blaming this on a lack of disturbance that would remove tree cover (Final Decision p. 3), ignoring the many species that rely on this habitat type.

EA No. NV-040-06-044 states that on the Willard Creek Allotment, standard 3: habitat and biota is not being met, but that significant progress towards meeting the standard is being made (Final Decision p. 3-4). The decision further claims that shrub composition is above ecological site potential in approximately 1,000 acres of native sagebrush and that the native grasses and forb component are below site potential (Final Decision p. 4). The EA completely fails to acknowledge how livestock may have contributed to this state. EA no. NV-040-06-045 also relates to this allotment. These decisions were approved with in a month of each other, yet the BLM segmented the renewal of these permits and failed to analyze the full amount of grazing that occurs on this allotment by segmenting the project (this is discussed later in this appeal).

Specific terms and conditions contained in these EAs authorizes 50% use on grasses and forbs and anywhere from 40% to 50% use on shrubs. These are the only terms and conditions, aside from locating salt and mineral supplements away from existing water sources, that the BLM is relying upon to meet both the requirements to meet the SRH, as well as its multiple use mandate, and thus meet the requirements of FLPMA.

NEPA requires that agencies "insure the professional integrity, including scientific integrity, of the discussions and analyses…They shall identify any methodologies used

and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions relied upon in the statement…"[1]

Furthermore, 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."[2] In other words, it "prohibits uninformed--rather than unwise--agency action."'[3] Yet, in the case of determining the appropriateness of using a 50% allowable use standard as a means of making of ensuring or making "significant progress" towards achieving the SRH, it appears that the BLM simply arrived at a pre-decisional conclusion that such use was appropriate, an action which NEPA and the APA forbid.

NEPA "ensures that important effects will not be overlooked or underestimated only to be discovered after resources have been committed or the die otherwise cast."[4] And, the publication of a NEPA document, both in a draft and final form, provides a springboard for public comment, and assures the public that the agency has considered the environmental concerns in its decision making process.[5]

NEPA is an action-forcing statute. Its sweeping commitment is to "prevent or eliminate damage to the environment and biosphere by focusing government and public attention on the environmental effects of proposed agency action."[6] It requires the federal agency to "consider every significant aspect of the environmental impact of a proposed action,"[7] and to ensure "that the agency will inform the public that it has indeed considered environmental concerns in its decision making process."[8]

NEPA documents must include all relevant information at the time the agency makes a recommendation on a proposal for federal action, not after the fact.[9] A central purpose of NEPA is to force the consideration of environmental impacts in the decision making process. That process requires that the NEPA process be integrated with agency planning "at the earliest possible time."[10] "NEPA procedures must ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken."[11]

Furthermore, the BLM has an obligation, pursuant to NEPA, to disclose the effectiveness of the proposed 50% use, herding and/or riding to keep cattle out of riparian areas, using winter season grazing, developing dense levels of watering sites for livestock to increase

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[1] 40 C.F.R. 1502.24
[2] Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348 (1989)
[3] Custer County Action Ass'n. v. Garvey, 256 F.3d 1024, 1034 (10th Cir. 2001)
[4] Robertson, 490 U.S. at 349
[5] Id
[6] Marsh v. Oregon Natural Resources Council, 490 U.S. 360, 371 (1989)
[7] Vermont Yankee Power Corp. v. Natural Resources Defense Council, 435U.S. 519, 553 (1978)
[8] Baltimore Gas and Electric Company v. NRDC, 462 U.S. 87, 97 (1983)
[9] See Kleppe v. Sierra Club, 427 U.S. 390, 405-406 (1976)
[10] 40 CFR 1501.2 (Council on Environmental Quality Regulations binding upon Forest Service)
[11] 40 CFR 1500.1(b)

distribution and therefore the forage base, and using disturbances such as prescribed fire, chaining, etc. in order to meet the SRH.

"Mitigation must be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated."[12] "A mere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA."[13] Failure to demonstrate the effectiveness of mitigation measures does not satisfy the intent of NEPA.[14] The BLM is obligated to prove that proposed mitigation will in fact be effective. The NEPA document must analyze mitigation measures in detail and explain the effectiveness of such measures.[15] In the case of these EAs, the mitigation measures are discussed, i.e. using a 50% utilization standard and various other means, but the effectiveness, monitoring and enforcement strategy for those measures is completely ignored.

NEPA prohibits the agency from simply asserting that these measures meet the requirement to meet or make significant progress towards meeting the SRH.

Clary and Leininger (2002)[16] note "Holechek et al. (1998, 1999), after reviewing numerous grazing studies, concluded that stocking rate rather than the grazing system was the primary factor that affected range condition…" Yet, again, the BLM continues to ignore the stocking rate on these allotments as Appellant has pointed out in numerous correspondence with the BLM for these projects, as well as others, including our comments on the DEIS for the new RMP (please see our discussion of stocking rates and AUM calculations attached in Appendix 1 to this appeal).

The BLM has failed to include any information regarding stream channel profile, streambank stability, streamside vegetation composition (e.g. the types of vegetation making up these communities), channel bottom embeddedness, stream sediments, stream temperature, level of channel widening, bank incision, etc. on the allotments that contain such resources. Has failed to acknowledge the habitat components required by a number of sensitive species within the project area, including sage grouse, pygmy rabbits, and loggerhead shrikes, and has furthermore failed to define, and support with scientific literature and knowledge, the desired and required habitat components of the various vegetation communities discussed in these EAs.

Therefore, the BLM cannot insure the scientific and professional integrity of the assumption that the proposed terms and conditions and/or the annual use indicators will be in compliance with the SRH and FLPMA because it has failed to take a hard look at habitat characteristics within the project area to assure the adequacy of the 50% use to

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[12] Carmel-By-the-Sea v. U.S. Dep't of Transp., 123 F.3d 1142, 1154 (9th Cir. 1997) (quoting Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 353 (1989))
[13] Northwest Indian Cemetery Protective Ass'n. v. Peterson, 795 F.2d 688, 697 (9th Cir. 1986), rev'd on other grounds, 485 U.S. 439 (1988)
[14] [Nothwest Indian Cemetery Protective Association v. Peterson, 795 F. 2d 688 (9th Cir. 1986)].
[15] Northwest Indian Cemetery Protective Ass'n v. Peterson, cited above
[16] Clary, W.P., and W.C. Leininger. 2000. Stubble height as a tool for management of riparian areas. J. Range Manage. 53:562-573

protect habitat, soils, and other resources which are also part of the BLM's Multiple Use mandate.

The BLM's own Technical Reference 1737-14 (1997) supports this assertion. It states the following:

> "Due to the variation in riparian sites and management objectives, one standard utilization and/or residual vegetation target is not appropriate. However, utilization and/or residual vegetation should be considered (together with regrowth potential) to ensure that vegetation stubble necessary for natural stream functions is present or other land use objectives (e.g. residual nesting cover for waterfowl [or salmonid habitat requirements {these words are the Appellant's}] are accomplished."

Furthermore, in regards to areas within this allotments that contain riparian areas, springs, and seeps, the BLM has not supported its assertion that these resources will be degraded to a point where the SRH are not met, or that the approved level of grazing will continue to provide habitat for migratory birds, amphibians, sensitive species, and other species that rely upon these areas for habitat.

For example, Clary and Leininger (2000) (previously footnoted), indicates that the BLM's rosy assumptions may be invalid. For example, the paper cites Clary (1999)[17] and states that a reduction in the following year's growth was noted in higher elevation sedge-dominated communities when they were grazed to a 5-cm height in the spring, or to a 10-cm height in late summer (Clary 1995).

Additionally, higher elevation sites, particularly those that support substantial amounts of sedges and rushes (*Juncus* spp.), may have less than 5% regrowth in total standing crop during August and September[18] (Sheeter and Svejcar 1997), or only 2.5 to 5 cm in average additional height (W. Clary, unpublished data). Gillen et al. (1985) recorded no regrowth after July in the Blue Mountains of Oregon. Therefore, it is concluded that for some areas meaningful increases in stubble height following grazing can not be assumed, particularly at higher elevations. This is particularly relevant since the BLM relies on regrowth following early season grazing to stabilize streambanks and improve riparian functions.

Furthermore, Marlow and Pogacnik (1985)[19] found that limiting livestock grazing to periods when streambanks were relatively dry could greatly reduce physical damage.

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[17] **Clary, W.P. 1999.** Stream channel and vegetation responses to late spring cattle grazing. J. Range Manage. 52:218–227.

[18] **Sheeter, G. and T. Svejcar. 1997.** Streamside vegetation regrowth after clipping. Rangelands 19:30–31.

[19] **Marlow, C.B. and T.M. Pogacnik. 1985.** Time of grazing and cattle-induced damage to streambanks, p. 279–284. *I n :* R . R . Johnson, C.D. Ziebell, D.R. Patton, P.F. Ffolliott, and R.H. Hamre (tech. coords.), Riparian ecosystems and their management: reconciling conflicting uses: first North American riparian conference. USDA For. Serv. Gen. Tech. Rep. RM-120. Fort Collins, Colo.

Moreover, the impacts to vegetation from grazing at a 50% utilization level on most of the vegetation communities in the project will result in numerous impacts that have not been disclosed in the EA.

For example, Grazing season has more influence on winterfat than grazing intensity. Late winter or early spring grazing is detrimental.[20]

On some heavily grazed rangelands, other species are replacing winterfat. Areas formerly dominated by winterfat in the Duckwater Watershed in Nevada have been converted to flixweed tansymustard (Descurainia sophia) or have been invaded by halogeton (Halogeton glomeratus) or Russian-thistle (Salsola kali).[21] But the EAs for the Duckwater Allotment fail to disclose this information and the indirect impacts of such a conversion on habitat, watershed processes, etc.

Winterfat is generally not favored by disturbance. It had only 4.3 percent cover on formerly cultivated, ungrazed lands, whereas cover was 21 percent on undisturbed sites in Alberta.[22] Winterfat significantly ($p<0.01$) increased in desert grasslands protected from grazing for 10 years in southern Utah.[23] In southwestern Nevada, winterfat had greater mean density in undisturbed communities than in communities disturbed by Nevada Test Site activitieshttp://www.fs.fed.us/database/feis/plants/shrub/kralan/references.html - 36.[24] Yet, none of these impacts from grazing, especially at rate proposed in these EAs for winterfat communities is not discussed in the EAs. Winterfat is an important habitat and forage component for wintering wildlife such as deer and elk, and since winter range exists on a number of these allotments, the BLM has an obligation to disclose whether or not allowing 50% utilization by livestock ensures adequate wintering habitat for wildlife. These EAs fail to do so. As appellant has previously noted, the BLM is not allowed to simply assert that no impact will occur. The BLM must find justification for its assertions in the world of science.

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[20] Blaisdell, James P.; Holmgren, Ralph C. 1984. Managing Intermountain rangelands--salt-desert shrub ranges. Gen. Tech. Rep. INT-163. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. 52 p. [464]
Chambers, Jeanne C.; Norton, Brien E. 1993. Effects of grazing and drought on population dynamics of salt desert species on the Desert Experimental Range, Utah. Journal of Arid Environments. 24: 261-275. [22099]
Whisenant, S. G.; Wagstaff, F. J. 1991. Successional trajectories of a grazed salt desert shrubland. Vegetatio. 94(2): 133-140. [16879]

[21] Blackburn, Wilbert H.; Tueller, Paul T.; Eckert, Richard E., Jr. 1968. Vegetation and soils of the Duckwater Watershed. Reno, NV: University of Nevada, College of Agriculture. 81 p. In cooperation with: U.S. Department of the Interior, Bureau of Land Management. [7439]

[22] Dormaar, Johan F.; Adams, Barry W.; Willms, Walter D. 1994. Effect of grazing and abandoned cultivation on a Stipa-Bouteloua community. Journal of Range Management. 47(1): 28-32. [22922]

[23] Kleiner, Edgar F. 1983. Successional trends in an ungrazed, arid grassland over a decade. Journal of Range Management. 36(1): 114-118. [21578]

[24] Gabbert, W. D.; Schultz, B. W.; Angerer, J. P.; Ostler, W. K. 1995. Plant succession on disturbed sites in four plant associations in the northern Mojave Desert. In: Roundy, Bruce A.; McArthur, E. Durant; Haley, Jennifer S.; Mann, David K., compilers. Proceedings: wildland shrub and arid land restoration symposium; 1993 October 19-21; Las Vegas, NV. Gen. Tech. Rep. INT-GTR-315. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station: 183-188. [24846]

Furthermore, prior to the invasion of exotic annuals, fire was an uncommon component of salt-desert shrub communities. Salt-desert communities dominated by winterfat produced little fine fuel. The introduction of annual grasses, including the highly flammable cheatgrass (Bromus tectorum), into these communities has altered fuel loads and fuel distribution. The direct, indirect, and cumulative impacts of such activities have not been disclosed.

After wet years when annual grass production is high, salt-desert shrub communities are susceptible to fire. Fire drastically alters the community composition because salt-desert shrubs are not adapted to periodic fire.[25]

Indian ricegrass is often used most heavily in late winter, when succulent and nutritious new green leaves are produced.[26] It supplies a source of green feed before most other native grasses have produced much new growth.[27] Consequently, Indian ricegrass is often heavily grazed before animals leave winter ranges.[28]

Heavy early spring grazing may sharply reduce the vigor of Indian ricegrass and decrease the stand.[29] Plants that do survive exhibit poor vigor with short sparse foliage and dead centers, and may produce no litter or flower stalks.[30] In eastern Idaho, productivity of Indian ricegrass was at least 10 times greater in undisturbed plots than in heavily grazed

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[25] Dormaar, Johan F.; Adams, Barry W.; Willms, Walter D. 1994. Effect of grazing and abandoned cultivation on a Stipa-Bouteloua community. Journal of Range Management. 47(1): 28-32. [22922]
Pellant, Mike. 1990. The cheatgrass-wildfire cycle---are there any solutions? In: Mcarthur, E. Durant; Romney, Evan M.; Smith, Stanley D.; Tueller, Paul T., compilers. Proceedings--symposium on cheatgrass invasion, shrub die-off, and other aspects of shrub biology and management; 1989 April 5-7; Las Vegas, NV. Gen. Tech. Rep. INT-276. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station: 11-18. [12730]
Peters, Erin F.; Bunting, Stephen C. 1994. Fire conditions pre- and postoccurrence of annual grasses on the Snake River Plain. In: Monsen, Stephen B.; Kitchen, Stanley G., compilers. Proceedings--ecology and management of annual rangelands; 1992 May 18-22; Boise, ID. Gen. Tech. Rep. INT-GTR-313. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station: 31-36. [24249]
West, Neil E. 1994. Effects of fire on salt-desert shrub rangelands. In: Monsen, Stephen B.; Kitchen, Stanley G., compilers. Proceedings--ecology and management of annual rangelands; 1992 May 18-22; Boise, ID. Gen. Tech. Rep. INT-GTR-313. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station: 71-74. [24256]

[26] Hutchings, Selar S. 1954. Managing winter sheep range for greater profit. Ogden, UT: U.S. Department of Agriculture, Forest Service. 46 p. [23306]
Hutchings, Selar S.; Stewart, George. 1953. Increasing forage yields and sheep production on Intermountain winter ranges. Circular No. 925. Washington, DC: U.S. Department of Agriculture. 63 p. [1227]

[27] Quinones, Ferdinand A. 1981. Indian ricegrass evaluation and breeding. Bulletin 681. Las Cruces, NM: New Mexico State University, Agricultural Experiment Station. 19 p. [1493]

[28] Green, Lisle R.; Sharp, Lee A.; Cook, C. Wayne; Harris, Lorin E. 1951. Utilization of winter range forage by sheep. Journal of Range Management. 4: 233-241. [7891]

[29] Stubbendieck, J.; Nichols, James T.; Roberts, Kelly K. 1985. Nebraska range and pasture grasses (including grass-like plants). E.C. 85-170. Lincoln, NE: University of Nebraska, Department of Agriculture, Cooperative Extension Service. 75 p. [2269]

[30] Baker, William L.; Kennedy, Susan C. 1985. Presettlement vegetation of part of northwestern Moffat County, Colorado, described from remnants. The Great Basin Naturalist. 45(4): 747-783. [384]

ones.[31] In southeastern Idaho where grazing was eliminated for 25 years, Indian ricegrass increased in cover 5 fold. Both the density and basal area decreased with increasing grazing intensity in Glen Canyon National Recreation Area, Utah. The seed crop may be reduced where grazing is heavy.[32]

Although not preferred, all classes of livestock may use galleta when it is dry.[33]

Grazing pressure usually allows for increased presence of annuals, which may overtake perennials depending upon duration of grazing.[34] Galleta is considered tolerant to highly resistant of grazing in the south, increasing as competing species cover decreases.[35] In areas where more palatable species are present, galleta acts as a facultative forage species, often showing better representation in grazed than in non-grazed and heavily grazed areas.[36] Greater use of galleta occurs in areas where other more palatable species, such as Indian ricegrass, are not as abundant.[37]

Galleta possesses several adaptations to grazing in arid rangelands. Galleta's resistance to drought and tough, woody rhizome contribute to grazing tolerance.[38] Although tolerant of grazing, rotational schedules are recommended. Galleta requires periods of rest to

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[31] Pearson, L. C. 1976. Primary production in grazed and ungrazed desert communities of eastern Idaho. Ecology. 46(3): 278-285. [1854]

[32] Bich, Brian S.; Butler, Jack L.; Schmidt, Cheryl A. 1995. Effects of differential livestock use of key plant species and rodent populations within selected Oryzopsis hymenoides/Hilaria jamesii communities in Glen Canyon National Recreation Area. The Southwestern Naturalist. 40(3): 281-287. [26494]

[33] Humphrey, Robert R. 1970. Arizona range grasses: Their description, forage value and management. Bulletin 298 [Revised]. Tucson, AZ: The University of Arizona, Agricultural Experiment Station. 159 p. [5567]

[34] Whisenant, S. G.; Wagstaff, F. J. 1991. Successional trajectories of a grazed salt desert shrubland. Vegetatio. 94(2): 133-140. [16879]

[35] Bich, Brian S.; Butler, Jack L.; Schmidt, Cheryl A. 1995. Effects of differential livestock use of key plant species and rodent populations within selected Oryzopsis hymenoides/Hilaria jamesii communities in Glen Canyon National Recreation Area. The Southwestern Naturalist. 40(3): 281-287. [26494]
Daddy, F.; Trlica, M. J.; Bonham, C. D. 1988. Vegetation and soil water differences among big sagebrush communities with different grazing histories. The Southwestern Naturalist. 33(4): 413-424. [6107]
Vallentine, John F. 1961. Important Utah range grasses. Extension Circular 281. Logan, UT: Utah State University. 48 p. [2937]

[36] Bich, Brian S.; Butler, Jack L.; Schmidt, Cheryl A. 1995. Effects of differential livestock use of key plant species and rodent populations within selected Oryzopsis hymenoides/Hilaria jamesii communities in Glen Canyon National Recreation Area. The Southwestern Naturalist. 40(3): 281-287. [26494]
Daddy, F.; Trlica, M. J.; Bonham, C. D. 1988. Vegetation and soil water differences among big sagebrush communities with different grazing histories. The Southwestern Naturalist. 33(4): 413-424. [6107]
Kleiner, Edgar F. 1983. Successional trends in an ungrazed, arid grassland over a decade. Journal of Range Management. 36(1): 114-118. [21578]

[37] Hutchings, Selar S.; Stewart, George. 1953. Increasing forage yields and sheep production on Intermountain winter ranges. Circular No. 925. Washington, DC: U.S. Department of Agriculture. 63 p. [1227]

[38] Blaisdell, James P.; Holmgren, Ralph C. 1984. Managing Intermountain rangelands--salt-desert shrub ranges. Gen. Tech. Rep. INT-163. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. 52 p. [464]

maintain coverage. Continuous grazing to stubble heights less than 4 inches (10 cm) will eventually remove galleta.[39]

In addition, budsage is highly susceptible to effects of browsing. It decreases under browsing due to year-long palatability of its buds and is particularly susceptible to browsing in the spring when it is physiologically most active.[40] Heavy browsing may kill budsage rapidly.[41]

Pieper and Donart[42] found populations of saltbush in south-central New Mexico suffered 25% mortality under continuous cattle browsing. They concluded fourwing saltbush populations do best when given year-long periodic respites from browsing.

Within shrub steppe of southwestern Idaho, shadscale provides cover for sage sparrows, Brewer's sparrows, sage thrashers, and western meadowlarks.[43]

Increased presence of shadscale within grazed versus ungrazed areas is generally a result of the decreased competition from more heavily browsed associates.[44] Reduced competition from more palatable species in heavily grazed areas may increase shadscale germination and establishment. Chambers and Norton[45] found shadscale establishment higher under spring than winter browsing as well as heavy compared to light browsing.

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[39] Gay, Charles W., Jr.; Dwyer, Don D. 1965. New Mexico range plants. Circular 374. Las Cruces, NM: New Mexico State University, Cooperative Extension Service. 85 p. [4039]
Judd, B. Ira. 1962. Principal forage plants of southwestern ranges. Stn. Pap. No. 69. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 93 p. [1302]

[40] Chambers, Jeanne C.; Norton, Brien E. 1993. Effects of grazing and drought on population dynamics of salt desert species on the Desert Experimental Range, Utah. Journal of Arid Environments. 24: 261-275. [22099]

[41] Wood, Benjamin W.; Brotherson, Jack D. 1986. Ecological adaptation and grazing response of budsage (Artemisia spinescens). In: McArthur, E. Durant; Welch, Bruce L., compilers. Proceedings--symposium on the biology of Artemisia and Chrysothamnus; 1984 July 9-13; Provo, UT. Gen. Tech. Rep. INT-200. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station: 75-92. [2593]

[42] Pieper, Rex D.; Donart, Gary B. 1978. Response of fourwing saltbush to periods of protection. Journal of Range Management. 31(4): 314-315. [45836]

[43] Knick, Steven T.; Rotenberry, John T. 1995. Landscape characteristics of fragmented shrubsteppe habitat and breeding passerine birds. Conservation Biology. 9(5): 1059-1071. [26004]

[44] Blaisdell, James P.; Holmgren, Ralph C. 1984. Managing Intermountain rangelands--salt-desert shrub ranges. Gen. Tech. Rep. INT-163. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. 52 p. [464]
Cibils, Andres F.; Swift, David M.; McArthur, E. Durant. 1998. Plant-herbivore interactions in Atriplex: current state of knowledge. Gen. Tech. Rep. RMRS-GTR-14. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 31 p. [29147]
Holmgren, Ralph C.; Hutchings, Selar S. 1972. Salt desert shrub response to grazing use. In: McKell, Cyrus M.; Blaisdell, James P.; Goodin, Joe R., eds. Wildland shrubs--their biology and utilization: Proceedings of a symposium; 1971 July; Logan, UT. Gen. Tech. Rep. INT-1. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station: 153-164. [1188]

[45] Cibils, Andres F.; Swift, David M.; McArthur, E. Durant. 1998. Plant-herbivore interactions in Atriplex: current state of knowledge. Gen. Tech. Rep. RMRS-GTR-14. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 31 p. [29147]

Within the northern Great Plains (Montana), shadscale is most tolerant of intermediate livestock stocking rates.[46] Hutchings[47] recommends 25% use of annual shadscale growth within winter ranges of Utah, Nevada, southern Idaho, and southwest Wyoming. Cook and Child[48] found shadscale was most tolerant of light (30% overall herbage removal) winter browsing.

The BLM has failed to consider the fact that a 50% utilization rate results in a degree of grazing stress that may fail to allow for meeting the SRH, has failed to even consider the impacts of grazing at such a high rate, and has failed to disclose the impacts of such use. This violates the BLM's obligation to meet or make significant improvement towards attaining the SRH.

The BLM has failed to discuss the effectiveness of this standard, has failed to ensure the scientific and professional integrity of the conclusions at which it arrived in the EA, and therefore cannot ensure that the proposed action will meet the SRH. The EA, FONSI, and Final Decision therefore violate NEPA and FLPMA.

Specifically, the Standards for Rangeland Health state that rangeland management practices should address improvement beyond the standards, significant progress toward achieving standards, time necessary for recovery, and time necessary for predicting trends. It also requires the following:

> 2.4 Grazing management practices will consider both economic and physical environment, and **will address all multiple uses** including, but not limited to, (i) recreation, (ii) minerals, (iii) cultural resources and values, and (iv) designated wilderness and wilderness study areas.
>
> 2.5 New livestock facilities will be located away from riparian and wetland areas if they conflict with achieving or maintaining riparian and wetland functions. Existing facilities will be used in a way that does not conflict with achieving or maintaining riparian and wetland functions, or they will be relocated or modified when necessary to mitigate adverse impacts on riparian and wetland functions. The location, relocation, design and use of livestock facilities will consider economic feasibility and **benefits to be gained for management of lands outside the riparian area** along with the effects on riparian functions.
>
> 2.6 Subject to all valid existing rights, the design of spring and seep developments shall include provisions to protect ecological functions and processes.

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[46] Houston, Walter R.; Woodward, R. R. 1966. Effects of stocking rates on range vegetation and beef cattle production in the Northern Great Plains. Technical Bulletin No. 1357. Washington, DC: U.S. Department of Agriculture, Agricultural Research Service. 58 p. In cooperation with: Montana Agricultural Experiment Station. [4285]

[47] Hutchings, Selar S. 1954. Managing winter sheep range for greater profit. Farmers' Bulletin No. 2067. Washington, DC: U.S. Department of Agriculture. 46 p. [23306]

[48] Cook, C. Wayne; Child, R. Dennis. 1971. Recovery of desert plants in various states of vigor. Journal of Range Management. 24: 339-343. [677]

"Habitats of special status species should be able to sustain viable populations of those species."

3.1 Mosaics of plant and animal communities that foster diverse and productive ecosystems should be maintained or achieved.

3.2 Management practices should emphasize native species except when others would serve better for attaining desired communities.

3.4 Grazing management practices should be planned and implemented to provide for integrated use by domestic livestock and wildlife, as well as wild horses and burros inside Herd Management Areas (HMAs).

3.5 Management practices will promote the conservation, restoration and maintenance of habitat for special status species.

3.6 Livestock grazing practices will be designed to protect fragile ecosystems of limited distribution and size that support unique sensitive/endemic species or communities. Where these practices are not successful, grazing will be excluded from these areas.

The BLM has failed to acknowledge how grazing impact other uses, has failed to note any "benefits" from the increased use associated with the large amounts of new watering sites in the Sand Spring Allotment, had failed to show how these developments will not harm upland communities (failed to even consider the impacts from such use on vegetation in the project area) and ensure that ecological process are protected, failed to provide that mosaics of plant and animal communities that foster diverse and productive ecosystems would be maintained or achieved because BLM NEVER considered the habitat requirements of any species other than livestock, failed to plan and implement for integrated use by livestock and wildlife and wild horses because it never considered forage production and the needs of wildlife, has failed to consider the habitat needs of sensitive species of wildlife, and has failed to consider the decline of the sagebrush steppe ecosystem and the unique and endemic species found in those communities (especially in regards to cheatgrass expansion), and therefore is in violation of the above SRH.

In addition, cattle prefer gentle sloping terrain and tend to avoid slopes in excess of 10%.[49] Consequently, physically diverse ranges will have areas of over-utilization adjacent to areas with under-utilization, because the negative interaction between slope

[49] **Mueggler, W.F. 1965.** Cattle distribution on steep slopes. J. Range Manage. 18:255-257.
Cook, C. 1966. Factors affecting utilization of mountain slopes by cattle. J. Range Manage. 19:200-204.
Van Vuren, D. 1982. Comparative ecology of bison-and cattle in the Henry Mountains. Utah. J.M. Peek and P.D. Dalke. eds. ***In:*** Wildlife-Livestock Relationships Symp.: Proc. 10. Univ. Idaho, Forest Wildlife and Range Exp. Sta., Moscow.

and distance to water promotes over concentration of use on level areas adjacent to water sources.[50]

Pinchak et. al. found that 77% of observed use was within 366 m of water. Approximately 65% of the land area was beyond 723 m from water and sustained only 12% of observed use. Cattle concentrated use (79%) on slopes less than 7%. Consequently 35% of the area, on or surrounded by slopes >10%, received only 7% of observed use. Loamy, grazable woodland and wetland sub-irrigated range sites were most preferred and accounted for over 65% of observed use while occupying less than 35% of the land area. Overall, course upland, very shallow and shallow loamy sites were not preferred. Observed use was significantly ($P<0.10$) correlated (r 0.41 to 0.69) with standing crop and crude protein standing crop over various growth form characteristics of the forage component.

In terms of preference, areas within 366 mm of water were preferred while distances beyond that were avoided. More variation in actual and percent observed use was accounted for by a combination of growth form, standing crop, and crude protein variables. These results indicate that not only is absolute forage standing crop an important characteristic for site preference but also the chemical and growth form composition of that standing crop as these affect caloric density of the diet. These results suggest that as forage resources among sites became more similar, there was insufficient energetic advantage to cattle for discrimination among range site types.

The authors concluded that uniform livestock dispersion across foothill and mountain landscapes is first constrained by the spatial distribution of water and physiographic complexity. Subsequently, within existing dispersion constraints cattle utilize available plant communities based upon intrinsic forage characteristics that vary temporally. Finally, seasonal cattle use of extant foothill complexes can be predicted reasonably well from intrinsic forage characteristics. Meaning that as forage dries and cures during the grazing season, cattle are drawn towards lusher vegetation—usually in riparian areas or areas close to water.

Moreover, the majority of land within the project area lack natural water sources for livestock, yet the BLM is seeking better distribution of livestock on many of these allotments in an attempt to "even" out distribution and "increase the forage base." The BLM claims this will work while providing no evidence in that regard and has failed to consider the topographic limitations that may exist that will likely hamper efforts to increase distribution. In addition, the BM has failed to disclose the fact that many of the areas that currently sustain heavy use by livestock are valley bottoms infested with cheatgrass, and increasing livestock distribution will more than likely result in the

[50] Pinchak, W.E. et. al. 1991 Beef cattle distribution patterns on foothill range. Journal of Range Management. 44(3)
Cook, C. 1966. Factors affecting utilization of mountain slopes by cattle. J. Range Manage. 19:200-204
Roath, L.R., and W.C. Krueger. 1982b. Cattle grazing influence on a mountain riparian zone. J. Range Manage. 35:1-&)-IO5
Van Rees, H., and G.D. Huston. 1983. The behavior of free ranging cattle on an alpine range in Australia. J. Range Manage. 36:740-743.

expansion of cheatgrass, upslope, increasing fire and resulting in a decline of important ecosystem processes and the loss of native shrub-steppe habitats and the species which depend on them.

Many of the BLM lands within these allotments tend to be relatively isolated in mountainous topography with moderate to steep slopes. The EA lacks any discussion regarding cattle affinity for low sloping topography and the difficulty with keeping livestock out of more level areas or from loitering around water sources—especially during the hot season.

In fact, the 50% utilization rate is the sole basis upon which BLM asserts that lands will meet or make significant improvement towards meeting the SRH. The EAs fails to accurately describe the effectiveness of this measure, and that effectiveness is refuted here with scientific literature the BLM ignores, but had at its disposal. Thus, the BLM has failed to take the required "hard" look at its actions, has failed to discuss the effectiveness of these mitigation measures, and cannot assure that the requirements of the SRH will be met in violation of FLPMA and NEPA.

In addition, to ensure that livestock grazing and its associated activities are not resulting in a violation of the SRH, the full suite of management options BLM considers necessary, such as fences, water developments and other infrastructure that may be required to ensure the effectiveness of grazing management, should have been analyzed in this NEPA process.

Moreover, agencies may not arbitrarily carve out or "segment" key decisions or issues that are "connected" or "related," for separate NEPA analysis.[51]

Case law has determined that related proposals also must be considered for decision together in a single NEPA document when they are "connected actions" or "cumulative actions."[52] This NEPA requirement prevents the division of a project into multiple "actions," each of which individually might have a lesser environmental impact but which collectively have a substantial impact.[53] This is the exact move made by the BLM.

All of these EAs referenced in this appeal that have been prepared for permit renewals across the EFO are inadequate to meet the requirements of NEPA in their discussion of potential impacts on the spread of cheatgrass to which the area is susceptible, given that EAs analyzed only the impact of proposed permit renewals, analyzed impact of that action only in specific area of each individual permit renewal, and performed no cumulative impact analysis of these permit renewals together or on reasonably foreseeable future actions outside area

[51] Thomas v. Peterson, 753 F.2d 754, 758 (9th Cir. 1985); Town of Huntington v. Marsh, 859 F.2d 1134, 1142 (2d Cir. 1988); Sierra Club v. Watkins, 808 F. Supp. 852, 863 (D.D.C. 1991)
[52] 40 C.F.R. ' 1508.25(a); Save the Yaak v. Block, 840 F.2d 714, 719-21 (9th Cir. 1988).
[53] Thomas v. Peterson, 753 F.2d 754, 758 (9th Cir. 1985); Big Hole Ranchers Ass'n v. U.S. Forest Service, 686 F. Supp. 256, 261 (D. Mont. 1988).

which, in combination with these permit renewals, could be "collectively significant actions" over a time period.[54]

In the absence of environmental impact statement (EIS) analyzing impact of reasonably foreseeable future permit renewals and the ones here mentioned on the spread of cheatgrass in the district within the range of cheatgrass in the resource management plan (RMP), it is arbitrary and capricious, and a clear error in judgment, for BLM not to include an analysis of the cumulative impacts of proposed permit renewals within the EFO in these EAs for permit renewals, pursuant to NEPA requirements.[55]

In addition, fencing, developing more water sources, and locations of salt/mineral supplements, utility rights-of-way, pipelines, etc. all impact resources and wildlife. The BLM is well aware of the fact that such "improvements" are going to be proposed, despite the fact that the effectiveness of such actions has never been determined. The impacts of such actions are directly connected to this proposal for meeting SRH and the impacts are cumulative. They must disclosed here, in these EAs, because without a discussion on these impacts and why such impacts are insignificant when combined with grazing and other impacts in the project area and adjacent watersheds, the FONSI cannot be justified.

For example, springs that are developed for livestock use deprive streams of stream flow needed to sustain aquatic life and fisheries, support wetlands and associated wildlife. They impact riparian areas and uplands over large areas and create "sacrifice areas" that are dominated by weeds or invasives and eroding soils and degrades areas that were in good ecological condition prior to their installation.[56]

There is no analysis of the damage to uplands and riparian areas due to water developments already in existence on these allotments, nor a discussion regarding the reasonably foreseeable future impacts associated with construction of "improvements" that will more than likely be proposed in the very near future, nor is there any objective or management specified to restore these lost resources. Lowered livestock stocking rates, livestock exclusion, hauling water and other management techniques can be used to eliminate the need for many of these water developments. In fact, a capability analysis of each allotment would show that many of them are in or near areas that are mostly not capable and these should be removed or decommissioned.

B. The Approved Action Does Not Account For the Habitat Needs of Sensitive Species and Wildlife in Violation of FLPMA

43 CFR § 4180.1 (d) requires that habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal

[54] National Environmental Policy Act of 1969, § 102(2)(C), 42 U.S.C.A. § 4332(2)(C); 40 C.F.R. §§ 1508.7, 1508.25(a), 1508.27(b)(7), 1508.9(a, b).
[55] National Environmental Policy Act of 1969, § 102(2)(C), 42 U.S.C.A. § 4332(2)(C); 40 C.F.R. § 1508.7.

[56]Holechek, Jerry L., Rex D. Pieper and Carlton H. Herbel. 2001.Range Management: Principles and Practices, Fourth Edition. Prentice-Hall, New Jersey. 587p

proposed or candidate threatened and endangered species, and other special status species.

The EAs and permits discussed here fail to consider habitat needs and impacts.

Riparian areas, including springs and seeps, provide important habitat for a variety of bird species as well as amphibians, and sage, salt desert, or other arid lands provide habitats for pygmy rabbits, sage grouse, ferruginous hawk, loggerhead shrike, pinyon jay, etc. Some streams in the project area currently contain Bonneville cutthroat trout (BCT) and other important aquatic species.

The statement that the project area allotments do not contain sensitive species or habitats for such species appears to be based solely on opinion and conjecture which has been ruled illegal under NEPA. Decisions based on "best professional judgment" alone, such as the opinion of an unknown BLM employee, have been found to violate the APA and NEPA and have been overturned by the courts[57]. "As a result, allowing the Forest Service to rely on expert opinion without hard data either vitiates a plaintiff's ability to challenge an agency action….we conclude that NEPA requires that the public receive the underlying environmental data from which the expert derived (their) opinion." (ibid).

The EA is completely devoid of any surveys or other information regarding sensitive species within the project area. Much information could have been gained by the BLM from the state of Nevada where the Bureau's own information may have been lacking. BLM can not conduct valid FRH and EA processes without current site-specific surveys for important and sensitive species.

It is extremely important that the BLM consider the habitat needs of sensitive species in these EAs, because a lot of new information regarding these species has come to light since the approval of the RMPs in the 1980's. Furthermore, in the EFO should adopt guidelines for sage grouse from Connelly et al (2000) and incorporate protections and analysis from Connelly et al. (2004) ATTACHED as CD here.. There is no specificity in these EAs or the RMPs as regards to what the potential characteristics of preferred habitats for these species might be and there is no provision of a systematic monitoring program to ensure that any guidelines will be enforced. Therefore, this must take place here, at the site-specific level.

The EA contains no description of the values of intact sagebrush ecosystems, pinyon-juniper systems, salt desert shrub, or other arid systems, and what amounts of grass, forbs and sagebrush cover occur in ungrazed and undisturbed habitats. The BLM has failed to acknowledge the habitat requirements of these species in the EA and therefore, the action violates FLPMA and NEPA.

While the EAs claim that some uplands within the allotments in the project area are currently in a mid to late seral status and good condition, the BLM has failed to ascertain that the level of forage consumption proposed is sustainable, while updating forage

[57] Idaho Sporting Congress v. Thomas, March 4, 1998

consumption and AUMS for heavier livestock, while still protecting habitat for sensitive species such as sage grouse. The EA fails to do this, fails to disclose the impacts that will be transferred to areas that previously received light use that provide habitat for sensitive species, and fails to contain any criteria regarding the habitat requirements for sensitive species in violation of FLPMA, the SRH, and NEPA.

The BLM has failed to show in the EAs that the vegetation in question can sustain the level of use proposed without degrading sensitive species habitat components in opposition to the objective of maintaining or improving habitat for special status species that is contained in FLPMA, the SRH, and the RMP.

Sage Grouse Habitat Requirements: Several authors have reviewed and documented the biology and habitat requirements for sage grouse during their various life stages. These life stages include leks or breeding, nesting, brood-rearing and wintering.

PLEASE NOTE that the principles and concepts applied to understanding sage grouse habitats in arid lands also apply to many other important and sensitive species in salt desert shrub, and other arid environments.

Braun et al (1977)[58] in their review found that leks or breeding sites were generally open areas surrounded by sagebrush and that nesting areas appeared to occur within a few kilometers of the lek sites. The maximum distance between leks and nesting sites reported was 12.9 km, with 59% being within 3.2 km. Successful nest sites had significantly greater sagebrush canopy cover (27%) as opposed to unsuccessful sites at 20%. An important component of the nesting sites is also the cover provided by herbaceous vegetation, particularly grasses. Connelly et al (2000)[59] reported a range of grass height at nest sites between 14 – 34 inches and a mean of 20 inches with canopy cover of grasses ranging from 4 to 51% with a mean of 16%. During broodrearing, grouse with chicks preferred more open sagebrush uplands at about 10% - 14% canopy, while loafing of adults occurred in stands with 30% canopy. Beginning in June and during mid-late summer, broods moved to more mesic sites such as meadows. Hockett (2002) stressed the importance of riparian and wet meadow sites during summer and fall. Wintering sites were reported to have greater than 20% sagebrush canopy cover.

Connelly et al (2000) summarized some general characteristics of sage grouse habitat in the following table:

[58] Braun, Clait E., Tim Britt and Richard O. Wallestad. 1977. Guidelines for maintenance of sage grouse habitats. Wildlife Society Bulletin 5(3):99-105.
[59] Connelly, John W., Michael A. Schroeder, Alan R. Sands, and Clait Braun. 2000. Guidelines to manage sage grouse populations and their habitats. Wildlife Society Bulletin 28(4):967-985.

	Breeding		Brood-rearing		Winter[e]	
	Height (cm)	Canopy (%)	Height (cm)	Canopy (%)	Height (cm)	Canopy (%)
Mesic sites[a]						
Sagebrush	40–80	15–25	40–80	10–25	25–35	10–30
Grass–forb	>18[c]	≥25[d]	variable	>15	N/A	N/A
Arid sites[a]						
Sagebrush	30–80	15–25	40–80	10–25	25–35	10–30
Grass/forb	>18[c]	≥15	variable	>15	N/A	N/A
Area[b]	>80		>40		>80	

The sagebrush canopy characteristic for breeding habitats is reported as a broad range, but it is important to remember that successful nests occur in areas with canopy cover at the high end of the range or higher as cited above.

Diets of sage grouse vary through the year and by age. Sage grouse depend entirely on sagebrush from October through April. In May, they shift to a forb-dominated diet (20–60%) with the remainder being mostly sagebrush. They shift back to sagebrush during September. Chicks begin life depending heavily on insects at about 60%, then shift to a forb dominated diet with about 15% sagebrush during the second month.

Braun et al (1977), Welch et al (1990)[60], Connelly et al (2000), and Connelly et al. (2004) report that spraying, burning and mechanical treatments of sagebrush resulted in declines of sage grouse.
Other activities such as construction of roads, power lines, fences, reservoirs, ranches, farms and housing developments have resulted in sage grouse habitat fragmentation and loss. Structures such as fences and power lines provide perch sites for raptors that prey on sage grouse and also result in injury or death when grouse collide with these. The EA fails to acknowledge and address these cumulative impacts along with the impacts of the proposed activity.

Also ignored is the research showing that sage grouse have high seasonal fidelity to seasonal ranges and females return to the same area to nest each year.[61]

Beck and Mitchell (2000) and Hockett (2002) reviewed the effects of livestock grazing on sage grouse. Livestock, by consuming herbaceous vegetation and reducing grass cover needed to conceal grouse nests from predation, reduce grouse production. Ground squirrels favored by high levels of grazing, combined with drought conditions account for significant nest predation. The depletion of forbs and loss of associated insects can

[60] Welch, Bruce L., Fred J. Wagstaff and Richard L. Williams. 1990. Sage grouse status and recovery plan for Strawberry Valley, Utah. USDA Forest Service Intermountain Research Station Research Paper INT-430

[61] Hockett, Glenn A. 2002. Livestock impacts on the herbaceous components of sage grouse habitat: a review. Intermountain Journal of Science 8(2):105-114.

directly impact chick survival.[62] Mattise (1995)[63] noted that *"we have poor strategies for protecting important brood rearing habitat during severe drought conditions. Riparian areas, springs and seeps are not being managed to provide vegetative recovery and enhancement."*

Rich (1985)[64] reviewed historical studies of sage grouse populations from 32 years of monitoring in southern Idaho and northwestern Utah. He concluded that sage grouse experience cyclic population patterns with 10 year highs. Mitchell and Maxfield (2001) analyzed results of lek counts in Utah from 1967 through 2000. They found a decreasing trend in numbers of males per lek site, and their data clearly shows a 10 year cycle of peaks and valleys.[65] The last valley was found in 1996 with an uptrend through 2000. It is important to reflect on these possible trends when analyzing results for short periods. Rich (1985)31 states, *"evaluations of grouse population responses to habitat changes are critically dependent on understanding the long-term population dynamics of the species, especially where such evaluations may be done over a period of a few years."* He concludes that *"Ten years data may be required to even begin an adequate definition of just the breeding habitat of a population."*

The EA has not considered any of this research. The following bullet points are extracted from the publications by Braun, Connelly and Welch cited above:

• Rehabilitation following wildfire or other disturbances should focus on reestablishing sagebrush and native herbaceous plants. Annual grass establishment following fire is detrimental. Grazing should not be allowed on seeded areas until plant recruitment has occurred.

• Range seedings should focus on establishing forbs, native grasses and sagebrush. Monoculture seedings of crested wheatgrass and other non-natives are discouraged.

• Applying insecticides to summer habitat is not recommended.

• Livestock use around water sources and wet meadows in brood rearing areas should be regulated through fencing or other management to restrict overuse.

• Grazing practices should be adjusted to maintain residual grass growth essential for nest concealment and then delay grazing the same areas until after nesting.

• Plot sage grouse use areas including leks, nesting areas, wintering sites, meadows and summer range or brooding areas on maps.

• Manage breeding habitats to support 15 – 25% canopy cover of big sagebrush, perennial herbaceous cover ≥18 cm in height with ≥ 15% canopy cover of grasses and ≥ 10% canopy cover of forbs.

• Most recently, Braun, Connelly and Shroeder (2005)37 have published more specific information defining seasonal habitat needs of sage grouse and Clait Braun has published

[62] Welch, Bruce L. and Craig Criddle. 2003. Countering Misinformation Concerning Big Sagebrush. USDA Forest Service Rocky Mountain Research Station RMRS-RP-40.
Beck, Jeffrey L. and Dean L. Mitchell. 2000. Influences of livestock grazing on sage grouse habitat. Wildlife Society Bulletin 28(4):993-1002.

[63] Mattise, Samuel N. 1995. Sage grouse in Idaho: Forum '94. Idaho BLM Technical Bulletin 95-15. 10p.

[64] Rich, Terrell. 1985. Sage grouse population fluctuations: evidence for a 10-year cycle. Idaho BLM Technical Bulletin 85-1. 20p.

[65] Maxfield, Brian D. and Dean L. Mitchell. 2001. Sage grouse in Utah. Utah Division of Wildlife Resources. 10p.

detailed management recommendations including livestock grazing utilization levels and management.[66]

Partners in Flight (Paige and Ritter, 1999)[67] provide management recommendations for sage grouse and migratory birds obligate to sagebrush-steppe. These include:

• Identify and protect those habitats that still have a thriving community of native understory and sagebrush plants.

• Maintain large, continuous blocks of unfragmented habitat.

• Maintain seeps, springs, wet meadows and riparian vegetation in a healthy state.

• Avoid practices that convert sagebrush to non-native grassland or farm land.

• Maintain stands of sagebrush for a balance between shrub and perennial grass cover.

• In large disturbed areas, sagebrush and perennial grasses may need to be reseeded to shorten recovery time.

• To maintain bluebunch wheatgrass vigor, avoid grazing during the growing season until plants begin to cure. Bluebunch wheatgrass is especially sensitive to heavy grazing during the growing season. Recovery of these plants following heavy grazing during a single spring can require 8 years under the best management and environmental conditions.

• Grazing plans will depend on the current condition and plant composition of the area. Defer grazing until after crucial growth periods. Note that in the presence of cheatgrass, deferred grazing can favor the cheatgrass.

• For sage grouse maintain average grass height of at least 18 cm in May and early June. Sharp-tailed grouse require 20 cm.

• Consider livestock exclusion from heavily damaged areas, particularly wet sites.

• Livestock concentrations around water developments can increase cowbird parasitism.

• Use fences with smooth top and bottom wires for exclosures around wet sites.

Miller and Eddleman (2000)[68] also provide an excellent review of sage grouse ecology, habitat and management. They emphasize that sage grouse habitat management plans

[66] Braun, Clait E. 2006. A Blueprint for Sage Grouse Conservation and Recovery. Grouse, Inc. May, 2006.
[67] Page, Christine and Sharon A. Ritter. 1999. Birds in a Sagebrush Sea: Managing Sagebrush Habitats for Bird Communities. Partners in Flight, Western Working Group. 47p.
[68] Miller, Richard F. and Lee L. Eddleman. 2000. Spatial and Temporal Changes of Sage Grouse Habitat in the Sagebrush Biome. Oregon State University Agricultural Experiment Station Technical Bulletin 151. 35p

must take into account landscape heterogeneity, site potential, site condition and habitat needs of sage grouse during different parts of their life cycle (breeding, nesting, brood rearing, wintering). They also stress the importance of accurate resource inventories and assessments before making management decisions as to when and how each community across the landscape should be managed. Grazing management plans must identify potential conflicts between sage grouse and livestock.

The EAs failed in this regard, and woefully fail to examine the direct, indirect and cumulative effects of fragmentation of habitats for sage grouse, loggerhead shrike, pinyon jay and other arid land species. The EAs also failed to include any data on lek locations, lek population counts, etc.

Cooperation between the state wildlife agencies of the sage-grouse states and the BLM, USFS, and USFWS is authorized by the Memorandum of Understanding (MOU) of August 2000. Provisions of that agreement include (BLM, 2001):
• The States will convene working groups to develop State or local sage grouse and sagebrush conservation plans;
• An interagency Conservation Planning Framework Team will be established to develop a range-wide Conservation Framework;
• The MOU Parties will begin collecting, analyzing and distributing sage-grouse population and habitat data to the working groups for conservation planning purposes.

The BLM has claimed on numerous occasions, especially during the listing process for sage grouse that these provisions are currently being acted upon. Where is the data? It is certainly not contained in these EAs.

The MOU also requires the BLM, USFS and FWS to:
• Provide for habitat protection, conservation and restoration consistent with the National Environmental Policy Act and other applicable laws, regulations, directives, and policies;
• Consider the WAFWA Guidelines for Management of Sage-grouse Populations and Habitats, State and Local Conservation Plans, and other appropriate information in their respective planning processes; and,
• Work together to identify research needs and strategies and conduct joint assessments, monitoring and research.

The BLM has also committed to several conservation efforts to protect the greater sage grouse in addition to the many statutory and regulatory measures already in place. The following examples of the numerous measures in place to conserve the greater sage grouse should have been recognized in these EAs, but because the BLM failed to consider the habitat needs for sage-grouse and other sensitive species, it cannot be said that BLM is upholding its obligation:

> The vision of the National BLM Sage-Grouse Habitat Conservation Strategy is to manage public land in a manner that will maintain, enhance, and restore sage grouse habitats while providing for multiple uses of BLM-administered public land.

Under FLPMA, "wildlife habitat management" is one of many dimensions included in BLM's multiple use mandate. . .

The 2004 Sage Grouse Conservation Assessment (Connelly et al. 2004) and new information on Global Warming (see Pellant Testimony, United Nations Report - Steinfeld et al. 2006 and other information Attached) demonstrates that the need for immediate protection and conservation actions have only increased.

The BLM has a special Status Species Policy (BLM Manual 6840) that states "…the BLM shall implement management plans that conserve candidate species and their habitats and shall ensure that actions authorized, funded, or carried out by BLM do not contribute to the need for the species to become listed" (section 6840.06C). WWP is unaware of any BLM office anywhere that has actually changed management on the ground, reduced stocking rates, closed pastures or allotments in degraded condition, placed areas off limits to OHVs, mining development and exploration, closed areas to oil, gas and mineral exploration or development specifically to protect sage grouse or migrant bird habitat. In fact, the opposite seems to be the case, were sage grouse and other habitat needs are used as an excuse for eliminating sagebrush, building fences, constructing water developments, all of which negatively affect sage grouse and migrant birds.

For the BLM, there are several sets of regulations associated with implementing FLPMA and other laws. Most of the regulations that may affect BLM management guidance concerning sage-grouse and other sensitive species management are found in Section 43 Code of Federal Regulations although some, such as the Council of Environmental Policy regulations, are found in other portions of the CFR.

43CFR Subpart 4120, Grazing Management, contains the regulatory authority for grazing administration, use authorizations, permit terms and conditions for achieving resource condition objectives. Subparts 4140-4170 outline prohibited acts, enforcement, and penalties. Subpart 4180 is an example of how regulations provide direction for sage-grouse conservation. Within the scope of these grazing regulations, 43 CFR 4180.2(d), are included specific direction to the BLM State Directors to develop standards that among other things would address:
"(4) Habitat for endangered, threatened, proposed, candidate, or **special status species**; and;
(5) Habitat quality for native plant and animal populations and communities..."

In addition, Subpart 4180.2(e) requires development of guidelines to address:
"(9) Restoring, maintaining or enhancing habitats of Federal proposed, Federal candidate, and other special status species to promote their conservation."

BLM Special Status Species Management – Manual 6840
Policy guidance for sage-grouse habitat conservation is summarized in this manual. It provides national-level policy direction, consistent with appropriate laws, for the conservation of special status species of animals and plants and the ecosystems on which they depend. *Conservation* in this Strategy, and consistent with 6840 policy, means the

use of all methods and procedures necessary to improve the condition of special status species and their habitats to a point where their special status recognition is no longer warranted.

The BLM cannot assert that this national direction is being carried out, when it continually ignores the issue during RMP development and the site-specific level as the EFO has done here.

Nothing in the EAs indicates that the BLM considered these factors or the guidelines for sage grouse and other sensitive species. This violates FLPMA and NEPA.

Migrant Birds: Woodyard et al (2003) conducted bird censuses along an elevational gradient in east-central Nevada. These censuses were conducted in study plots monitored in 1981 and 1982 by Dean E. Medin and found fewer species and total numbers of birds (62% less).[69] Parrish et al (2002)[70] also describe the declines in these birds due to a variety of factors relating to habitat. They provide descriptions of the birds in Utah most in need of conservation and describe their habitat requirements, threats and management considerations. They discuss habitats most in need of conservation. Habitats such as shrub-steppe occurring in the project area are described as in need of protection.

Medin et al (2000) provide a discussion of bird-habitat relationships for the Great Basin that provide insight into the habitats that occur in the project area and their relationships to these birds. Many of these birds are dependent on riparian areas.[71]

Paige and Ritter (1999) cite population declines of 63% and 70% in shrub dependent and grassland bird species during the last 30 years across the U.S. In the Intermountain West, more than 50% of shrub- and grassland species show downward trends with sagebrush steppe as the highest priority for conservation based on trends for habitat and bird populations.[72] They provide detailed descriptions of the history, characteristics and management of these systems with management recommendations. They note that cattle grazing in sagebrush steppe first select grasses and forbs and avoid browsing on sagebrush. In addition, even light grazing can put pressure on the herbaceous plants favored by livestock and intensive spring grazing prevents bunchgrasses from reproducing, eventually eliminating the palatable native bunchgrasses. They also discuss the response time for recovery of these systems and parasitism by cowbirds, a significant factor in decline of songbirds in some areas.

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[69] Woodyard, John, Melissa Renfro, Bruce L. Welch and Kristina Heister. 2003. A 20-year recount of bird populations along a Great Basin elevational gradient. USDA Forest Service Rocky Mountain Research Station Research Paper RMRS-RP-43.

[70] Parrish, Jimmie R., Frank Howe and Russell Norvell. 2002. Utah Partners in Flight Avian Conservation Strategy Version 2.0. Utah Division of Wildlife Publication No. 02-27. 305p.

[71] Medin, Dean E., Bruce L. Welch and Warren P. Clary. 2000. Bird habitat relationships along a Great Basin elevational gradient. USDA Forest Service Rocky Mountain Research Station Research Paper RMRS-RP-23. 22p.

[72] Rich, Terrell. 1985. Sage grouse population fluctuations: evidence for a 10-year cycle. Idaho BLM Technical Bulletin 85-1. 20p.

Taylor (1986) evaluated the effects of cattle grazing on birds nesting in riparian habitats.[73] He found that increased grazing resulted in decreases in shrub volume and density and decreased bird abundance. *"The longer the time since a transect was last grazed correlated significantly with increases in bird abundance, shrub volume and shrub height"*. Bird species decreased with increased grazing, bird counts were 5 to 7 times higher on an area ungrazed since 1940 than on 2 areas grazed annually until 1980 and 11 to 13 times higher on a transect that was severely disturbed. These are impacts that should have been noted in the EA since grazing in the uplands of these allotments will increase.

Krueper et al (2003) studied the changes in vegetation and breeding birds in the San Pedro River, Arizona following removal of cattle in 1987.[74] Birds were monitored for five years. Mean numbers detected along riparian transects increased by 23% per year or from 103/km in 1986 to 221/km in 1992. Earnst et al (2004) compared songbird abundance in 2000-2001 to that in 1991-1993, following cattle removal from the Sheldon National Wildlife Refuge in 1990.[75] Of 51 species for which abundances were sufficient to calculate changes, 71% exhibited a positive trend. Detections of ground/low cup and high cup nesting species, ground/understory foraging species, aerial and overstory foraging species increased significantly.

Rich (2002) evaluated the ability of riparian PFC assessments as employed by BLM and noted that they lacked the ability to incorporate assessment of land breeding bird communities.[76] He constructed a list of riparian-obligate birds that should occur on the site during the breeding season and used that to score the site based on the percent of those occurring there.

The EAs have failed to review the habitat requirements for migrant birds, the effects of livestock grazing at the permitted numbers in combination with all other habitat altering management proposed or reasonably foreseeable—meaning water developments, etc.—and provide prescriptions that will assure migrant birds and their habitat improve, in violation of FLPMA and NEPA. Based on the research, this will result in fewer migrant birds and sage grouse.

Pygmy Rabbits: The EAs completely fail to acknowledge the pygmy rabbit is in decline throughout the West; the EAs fail to describe current populations or the habitats required by pygmy rabbits. It has not described past management actions that have resulted in this decline and offered corrective actions to restore pygmy rabbits in the project area.

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[73] Taylor, Daniel M. 1986. Effects of cattle grazing on passerine birds nesting in riparian habitat. Journal of Range Management 39(3):254-258.

[74] Krueper, David, Jonathan Bart and Terrell D. Rich. 2003. Response of vegetation and breeding birds to the removal of cattle on the San Pedro River, Arizona (U.S.A.). Conservation Biology 17(2):607-615.

[75] Earnst, Susan L., Jennifer A. Ballard, and David S. Dobkin. 2004. Riparian songbird abundance a decade after cattle removal on Hart Mountain and Sheldon National Wildlife Refuges. USDA Forest Service PSW-GTR-191.

[76] Rich, Terrell D. 2002. Using breeding land birds in the assessment of western riparian systems. Wildlife Society Bulletin 30(4):1128-1139.

Welch (2004, in press)[77] reports his research in which he walked 300 miles in pygmy rabbit habitat, covering areas where pygmy rabbits were previously reported. In 37 stands of big sagebrush in northern Utah, he found 11 pygmy rabbits, with 8 occurring in a single stand of sagebrush. Out of 11 sites previously reported as supporting pygmy rabbits, he found no signs of occupancy with only four sites now having suitable habitat.

Suitable habitat consisted of big sagebrush with ≥ 20% canopy cover and ≥ 22 inches in height. He reported on significant deterioration and loss of habitat for pygmy rabbits through conversion of sagebrush stands to agriculture and treatments designed to improve forage conditions for livestock by reducing sagebrush cover. In his literature review, he provides some additional parameters describing wintering habitat for pygmy rabbits. The research showed the areas of highest winter use were in basin big sagebrush with canopy cover of 51%, compared to areas with moderate use having 42.7% canopy and low use in 38.6% canopy. Diets consist of 99% sagebrush in winter and 51% during summer with the remainder being herbaceous vegetation. DOI (2001)[78] summarizes additional diet characteristics for pygmy rabbits.

In particular, they were reported to rely on 39% grasses such as native Agropyron species and 10% forbs. Other characteristics described in both references include descriptions of soil conditions amenable to burrowing, such as deep soils.

The BLM must research pygmy rabbit habitat requirements and map potential pygmy rabbit habitat, describe its current condition and the causes of that condition. Then, the BLM must provide numeric criteria describing desired conditions of this habitat and place it off limits to surface disturbing activities or surface occupancy and limit livestock grazing by setting conservative utilization levels, providing rest to restore grasses and forbs needed to provide the necessary herbaceous forage during spring, summer and fall, and not impose the minimal sagebrush cover guidelines it continually uses as a justification for range "improvement" projects that have the sole purpose of increasing forage for domestic livestock. Because the EAs for these permit renewals, the RMP's from the 1980's, and the draft RMPs currently being developed have failed in these respects, these projects violate FLPMA, the MOU, and NEPA.

Loggerhead shrike: The Loggerhead shrike is a sensitive species that has shown decreases in population from historical densities and distribution.[79] Loss of shrub-steppe

[77] Welch, Bruce L. 2004. A Three Hundred Mile Search Afoot for Pygmy Rabbits. USDA Forest Service Rocky Mountain Research Station Research Paper in draft.

[78] DOI. 2001. Endangered and Threatened Wildlife and Plants; Emergency Rule to List the Columbia Basin Distinct Population Segment of the Pygmy Rabbit (Brachylagus idahoensis) as Endangered. Federal Register 66(231):59734-59749.

[79] Morrison, M. L. 1981. Population trends of the loggerhead shrike in the United States. American Birds 35:754-757.
Fraser, J. D., and D. R. Luukkonen. 1986. The loggerhead shrike. *in* R. L. Di Silvestro, editor. Audubon Wildlife Report 1986. National Audubon Society, New York, New York, USA.
Sauer, J. R., S. Orsillo, and B. G. Peterjohn. 1995. Geographic patterns and population trends of breeding and wintering loggerhead shrikes in North America. Proceedings of the Western Foundation of Vertebrate Zoology 6:128-141

habitat partially explains local declines of this species. The Interior Columbia River Basin Ecosystem Management Project has listed loggerhead shrike as a species of high management concern for the region.[80]

Suggested causes of population decline include loss of breeding habitat[81], low over-winter survival through loss of wintering areas[82], and contamination by pesticides[83].

To manage for loggerhead shrike habitat, Shrub-steppe communities should be left in reasonably undisturbed condition and fragmentation should be minimized.[84] Management activities that increase cheatgrass invasion or increase risk of wildfire also must be avoided.[85] In shrub-steppe and associated riparian habitats, retain patches of tall shrubs for nesting and perching.[86] Herbaceous cover should average <20% and should be dominated by native species >30% of the ground should be bare (including areas of cryptogramic crust).[87]

Removal of sagebrush or other tall arid shrubs should be considered only in rare instances when reducing shrub cover is necessary to meet ecological goals of habitat restoration. Sagebrush cover should be reduced on a site only after careful consideration of how the methods used may affect sagebrush regeneration and the opportunity for exotic

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Cade, T. J., and C. P. Woods. 1997. Changes in distribution and abundance of the loggerhead shrike. Conservation Biology 11:21-31.

[80] Saab, V. A. and T. Rich. 1997. Large-scale conservation assessment for neotropical migratory landbirds in theInterior Columbia River Basin. USDA Forest Service General Technical Report PNW-GTR-399.

[81] Kridelbaugh, A. L. 1981. Population trend, breeding and wintering distribution of loggerhead shrikes (*Lanius ludovicianus*) in Missouri. Transactions of the Missouri Academy of Science 15:111-119.
Burnside, F. L. and W. M. Shepherd. 1985. Population trends of the loggerhead shrike (*Lanius ludovicianus*) in Arkansas. Proceedings of the Arkansas Academy of Science 39:25-28.
Tyler, J. D. 1992. Nesting ecology of the loggerhead shrike in southwestern Oklahoma. Wilson Bulletin 104:95- 104.

[82] Haas, C. A., and S. A. Sloane. 1989. Low return rates of migratory loggerhead shrikes: winter mortality or low sitefidelity? Wilson Bulletin 101:458-460.
Brooks, B. L., and S. A. Temple. 1990a. Habitat availability and suitability for loggerhead shrikes in the uppermidwest. American Midland Naturalist 123:75-83.
____, ____. 1990b. Dynamics of a loggerhead shrike population in Minnesota. Wilson Bulletin 102:441-450.

[83] Kridelbaugh, A. L. 1981. Population trend, breeding and wintering distribution of loggerhead shrikes (*Laniusludovicianus*) in Missouri. Transactions of the Missouri Academy of Science 15:111-119.
Fraser, J. D., and D. R. Luukkonen. 1986. The loggerhead shrike. *in* R. L. Di Silvestro, editor. Audubon Wildlife Report 1986. National Audubon Society, New York, New York, USA.

[84] Woods, C. P., and T. J. Cade. 1996. Nesting habitat of the loggerhead shrike in sagebrush. The Condor 98:75-81.

[85] Leu, M., and D. A. Manuwal. 1996. Habitat requirements, status,and management of the loggerhead shrike of the Yakima Training Center. Final Report, College of Forest Resources, University of Washington, Seattle, Washington, USA.

[86] Leu, M., and D. A. Manuwal. 1996. Habitat requirements, status,and management of the loggerhead shrike of the Yakima Training Center. Final Report, College of Forest Resources, University of Washington, Seattle, Washington, USA

[87] Altman, B. and A. Holmes. 2000. Conservation strategy for landbirds in the Columbia Plateau of eastern Oregon and Washington. Final Report Version 1.0. Oregon-Washington Partners in Flight, Boring, Oregon, USA.

vegetation to invade the site. Burning may create the greatest risk to local shrike populations because the damage is immediate and regeneration to pre-burn condition may take up to 30 years.[88] Fire is not a suitable tool to reduce sagebrush cover in low rainfall zones because disturbance often leads to cheatgrass invasion and because sagebrush recovery is slow.[89]

Livestock grazing at low to moderate levels has not been shown to be detrimental to loggerhead shrike habitat[90]; however, sustained grazing likely will reduce habitat suitability[91]. In keeping with recommendations published for other shrub-steppe passerines[92], it is recommended that grazing levels should be sufficiently low to allow >50% of the year's growth of perennial bunchgrass to persist through the following breeding season.[93]

Bonneville Cutthroat Trout: Bonneville cutthroat trout (BCT) are currently designated as special status species by the state of Nevada, and are considered sensitive species by BLM. Typical of most trout, BCT require relatively cool, well oxygenated, water and the presence of clean, well sorted gravels with minimal fine sediments for successful spawning.

Grazing has been shown to negatively influence stream habitats and stream communities.[94] Past and some current livestock grazing practices adversely impact BCT and their habitat. Poor grazing practices can alter sediment transport regimes and stream bank stability and can change water quality, substrate composition and channel structure. Specific ramifications include loss of pool habitat, reduced instream cover, increased water temperature, and loss of quality substrate required for spawning and food production.

In Preuss, Dry, and Giraffe creeks, Idaho, habitat features in grazed sections were compared with those in ungrazed sections. Bank stability, the percentage of undercut banks, and the width:depth ratio, the percentage of fine sediment indicated poor habitat

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[88] Harniss, R. O. and R. B. Murray. 1973. 30 years of vegetal change following burning of sagebrush-grass range. J. Range Manage. 26:322-325.

[89] Wisdom, M. J., R. S. Holthausen, B. C. Wales, C. D. Hargis, V. A. Saab. 2000. Source habitats for terrestrial vertebrates of focus in the interior Columbia Basin: broad-scale trends and management implications. UDSA Forest Service General Technical Report PNW-GTR-485, Portland, Oregon, USA.

[90] Saab, V. A., C. E. Bock, T. D. Rich, and D. S. Dobkin. 1995. Livestock grazing effects in western North America. *in* T. E. Martin and D. M. Finch, editors. Ecology and management of Neotropical migratory birds. Oxford University Press, New York, New York, USA.

[91] Altman, B. and A. Holmes. 2000. Conservation strategy for landbirds in the Columbia Plateau of eastern Oregon and Washington. Final Report Version 1.0. Oregon-Washington Partners in Flight, Boring, Oregon, USA.

[92] Altman, B. and A. Holmes. 2000. Conservation strategy for landbirds in the Columbia Plateau of eastern Oregon and Washington. Final Report Version 1.0. Oregon-Washington Partners in Flight, Boring, Oregon, USA.

[93] Vander Haegen, Mathew. 2003. Loggerhead Shrike *Lanius ludovicianus*. Volume IV: Birds. 2003. Washington Department of Fish and Wildlife

[94] Keller, C.R., and K.P. Burnham. 1982. Riparian fencing, grazing, and trout habitat preference on Summit Creek, Idaho. North American Journal of Fisheries Management 2(1):53-59.

Platts, W.S., and L. Nelson. 1985. Stream-side and upland vegetation use by cattle. Rangelands. 7(1):5-7.

quality compared with the ranges of values found in ungrazed streams; trout populations declined from 1980 to 1992.[95] Biologists on the Bridger-Teton National Forest have surveyed grazed streams in the Thomas Fork Bear River drainage and found that streambank stability was below the desired condition set in forest planning documents.[96]

The BLM will likely argue that native trout species are not found in streams in the project area, but are, as pertains to BCT, limited to small headwater streams. However, *Marble Mountain Audubon v. Rice*[97] interprets NEPA to require federal agencies to consider biological corridors. The standard for such a review is the same "hard look" NEPA requires of other environmental effects. That means those corridors within the analysis area and **linkages with areas adjacent to, i.e. other allotments in the area need to be examined, plus the value of the entire analysis area as part of a larger corridor within or between ecosystems.** Friends of the Bitterroot, Inc. v. USFS[98], and Oregon Natural Resources Council v. John Lowe[99] also highlight the importance of including corridors as an element of consideration for an agency decision.
This means that the BLM must disclose how its management activities have led to isolation of populations of native trout, disclose the extent of that isolation, and take measures to address these factors.

Furthermore, this disclosure is the only way with which the BLM can comply with the cumulative impacts requirements of NEPA. While these allotments are scattered across the EFO, the only way to ascertain whether or not the impacts to sensitive species, including but not limited to, native fish, are significant is to analyze habitat requirements, consider fragmentation, and other activities, regardless of the agency or person undertaking those activities. Only in such a context can the BLM assert that the combined and cumulative impacts of livestock grazing on these allotments when combined with the other factors affecting habitat is not significant. Failure to undertake this analysis invalidates the FONSI and the EAs violate NEPA.

Second, the BLM should live up to its obligations in regards to the conservation assessments and plans for these species. Because the EFO has failed to even acknowledge sensitive species in these EAs, it cannot argue, with any validity, that it is upholding its obligation in this regard. Simply relying on PFC assessments and arguing that this is fulfilling the habitat requirements of native fish and other species ignores a large amount of peer-reviewed science—science that was provided to the EFO on numerous occasions.

For example, BLM's own technical manual states that *"Trout habitat conditions would be optimum from mid-seral to late seral. The threshold for any goal is at least PFC*

[95] Fallau, S.S. 1995. Seasonal stream flow effects on salmonid habitat, and observations of fish movement in Beaver Creek, Idaho-Utah. M.S. Thesis. Utah State University. 73pp.
[96] Nelson, R.S., 1993. Overfishing and the 602 guidelines: can the Magnuson Act work? Fisheries: 18(10):36-37.
[97] No. 90-15389, D.C. No. CV89-170-EJG, Sept. 13, 1990
[98] 900 F. Supp. 1368, 1372 (D. Mont 1994)
[99] 109 F.3d 521, 526 (9th Cir. 1997)

because any rating below this would not be sustainable."[100](emphasis added). At PFC, fish habitat lacks needed structural attributes such as undercut banks, overhanging vegetation and canopy cover, and more importantly, the BLM, in the EAs for these permit renewals, failed to consider ANY habitat requirements for fish and other aquatic or sensitive species.

In conclusion, the EAs, Final Decisions, and FONSIs fail to take into account the habitat requirements of sensitive species and therefore violate the statues and regulations described above. Because the BLM failed to account for any habitat requirements for any sensitive species in the EA, the EA violates NEPA and FLPMA. The EA violates the multiple-use mandate of section 302(a) of the Federal Land Policy and Management Act of 1976, 43 U.S.C. § 1732(a) (1994),because it authorizes livestock grazing of the Allotments without engaging in a reasoned and informed decision-making process showing that it had balanced competing resource values in order to best meet the present and future needs of the American people, especially in regards to sensitive species and meeting the SRH as Appellant has previously shown.

II. The EA, Final Decision, and FONSI Violate the National Environmental Policy Act (NEPA)

NEPA states that it is the responsibility of the federal government to use all practicable means to attain the widest range of beneficial uses of the environment without degradation or other undesirable and unintended consequences.[101]

The need for a detailed analysis of the site-specific resources and impacts of grazing on those resources is explicitly set forth in the case of National Resources Defense Council v. Morton.[102]

Furthermore, documents prepared as part of NEPA's "hard look" requirement "must not only reflect the agency's thoughtful and probing reflection of the possible impacts associated with the proposed project, but also provide a reviewing court with the necessary factual specificity to conduct its review." Second, NEPA mandates that government agencies inform the public of the potential environmental impacts of proposed actions **before** decisions are made and explain how their decisions address those impacts.[103]

It is well settled that a NEPA document must provide the decision-maker with adequate information to fully assess the impacts of an action. If the decision was reached procedurally, without individualized consideration and balancing of environmental

[100] U.S. D.O.I. 1993. Riparian Area Management Process for Assessing Proper Functioning Condition. TR-1737

[101] (NEPA, 42 U.S.C. 4231 Section 101(b)(3)).

[102] 388 F.Supp. 829 (D.D.C. 1974), aff'd, 527 F.2d 1386 (D.C. Cir. 1976) (per curiam), cert. denied, 427 U.S. 913 (1976)

[103] Id.; see also Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348 (1989) (observing that 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").

factors -- conducted fully and in good faith -- it is the responsibility of the courts to reverse.[104]

Moreover, the NEPA document must find justification for its findings in the outside universe of current scientific knowledge. "[A]n EIS that fails to disclose and respond to the opinions held by well-respected scientists concerning the hazards of the proposed action ... is fatally deficient."[105] If the EIS fails to disclose conflicts with current science and address them, there is no basis to believe that the agency's procedure "resulted in a reasoned analysis of the evidence before it, and that the [agency] made the evidence available to all concerned."[106] While the BLM did not prepare an EIS, NEPA's requirement that an agency must rely on the best available science also applies to an EA, including the document to which this appeal relates.

NEPA also requires that agencies "insure the professional integrity, including scientific integrity, of the discussions and analyses…They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions relied upon in the statement…"[107] In light of the lack of scientific integrity of the discussions and analysis regarding the project, the proposed action violates NEPA.

Furthermore, a "[M]ere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA."[108] "Without analytical detail to support the proposed mitigation measures, we are not persuaded that they amount to anything more than a 'mere listing' of good management practices."[109]

In addition, for an agency to utilize mitigation measures to support a FONSI, specific mitigation measures must "**completely compensate for any possible adverse environmental impacts**."[110] There is no evidence in the EA for the PRA that suggests the proposed mitigation, i.e. the annual use indicators and terms and conditions, even

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[104] Calvert Cliffs' Coordinating Committee v. U.S. Atomic Energy Commission, 449 F.2d 1109, 1115 (D.C. Cir. 1971); 42 U.S.C. Section 4332 (1976).

[105] Seattle Audubon Society v. Mosely, 798 F. Supp. 1473, 1479 (W.D. Wash. 1992), aff d sub nom., Seattle Audubon Society v. Espy, 998 F.2d 699 (9th Cir. 1993), quoting Friends of the Earth v. Hall, 693 F. Supp. 904, 934 (W.D. Wash. 1988).

[106] Friends of Endangered Species, Inc. v. Jantzen, 760 F.2d 976, 986 (9th Cir. 1985).

[107] 40 C.F.R. 1502.24

[108] Neighbors of Cuddy Mountain v. United States Forest Service, 137 F.3d 1372 (9th Cir. 1998) setting aside EIS in part on grounds that the USFS's mitigation analysis contained only "broad generalizations and vague references".

[109] Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1151 (9th Cir. 1998) (emphasis added) (remanding analysis to agency for failure to undertake EIS). See also National Audubon Society v. Hoffman, 132 F.2d 7, 17(2nd Cir. 1997) that mitigation measures relied upon by USFS to conclude that impacts would be reduced below level of significance must be supported by "substantial evidence".

[110] Cabinet Mountains Wilderness/Scotchman's Peak Grizzly Bears v. Peterson 685 F.2d at 682 (D.C. Cir. 1982).

come close to "**completely** compensating" for the adverse environmental effects associated with domestic livestock grazing, as we previously discussed.

NEPA's disclosure goals are "to insure the agency has fully contemplated the environmental effects of its actions and to insure the public has sufficient information to challenge the agency.[111] The lack of scientific or verifiable data indicating the appropriateness of the proposed action, or grazing in general, and indicating that the BLM considered the habitat needs of sensitive inhibits the public's ability to challenge the agency's determination that such use, and the amount of authorized use, is appropriate for the project area.

Interpretations of NEPA plainly state that an agency must include in its decision making process all pertinent information.[112] We cannot be assured that the PFO took the required "hard look" unless the information is contained in the EA.

Furthermore, NEPA and CEQ regulations are quite specific in requiring agencies to consider the cumulative effects of each alternative under consideration.[113] 40 CFR 1508.7 states the following:

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

Case law and court decisions further clarify the requirements for full analysis of cumulative effects. According to Fritiofson v. Alexander, 1986:

> " A meaningful cumulative-effects study must identify: (1) the area in which effects of the proposed project will be felt; (2) the impacts that are expected in that area from the proposed project; (3) other actions – past, proposed, and reasonably foreseeable – that have had or are expected to have impacts in the same area; (4) the impacts or expected impacts from these other actions; and (5) the overall impact that can be expected if the individual impacts are allowed to accumulate."

According to Neighbors of Cuddy Mountain v. United States Forest Serv.,[114] a NEPA document is to contain a "*reasonably thorough discussion of significant aspects of probable environmental consequence."*

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[111] Idaho Sporting Congress v. Thomas, 1998 WL 89066 (9th Cir. (Idaho)). *Citing* Inland Empire Public Lands Council v. United States Forest Service, 88 F.3d 754, 758 (9th Cir. 1996)."

[112] Trout Unlimited v. Morton 509 F.2d 1276 (9th Circuit, 1974)

[113] 40 CFR 1502.16, 1508.8, and 1508.25 (a) (2) and (c).

These regulations and court directions provide the legal standard upon which to evaluate the adequacy of the direct, indirect, and cumulative effects analysis in the EAs. Despite appellant's clear and repeated comments and the legal requirements pursuant to NEPA for analyzing the impacts to resources, the EAs failed to consider direct, indirect, and cumulative effects that may adversely affect: wildlife, including T&E species, wetlands, aquatic resources, riparian area, upland vegetation communities, water quality, and other resources.

A. The EA, Final Decision, and FONSI Fail to Disclose the Impacts to Vegetation Types, Communities, and "Rangeland" Resources, Cultural Resources, Paleontological Resources, Invasive/Non-Native Species, and Threatened/Endangered Animals and Sensitive Species

1. The EA failed to disclose impacts to vegetation

In order to address the concerns and impacts associated with domestic livestock grazing and comply with the SRH, the approved actions propose the following actions:

> 1. Allowable use levels as measured through a combination of key areas readings and use pattern mapping, will not exceed 50% on grasses and forbs, and 45% on shrubs during the authorized use period indicated on the Term Grazing Permit.
> 2. Salt and or mineral supplements for livestock would be located no closer than ¾ mile from existing water sources.
>
> 3. Wildlife escape ramps would be required, installed, and maintained by the permittee for every water trough used on their allotment(s)
>
> 4. The grazing permittee will watch for and report noxious weeds infestations in their allotment area.
>
> 5. Noxious weeds will be treated by methods to be approved by the authorized officer
>
> 6. Grazing will be conducted in compliance with the noxious weed schedules….

First of all, we seriously question the effectiveness of these proposed actions for meeting the SRH as we previously discussed. The scientific literature supports Appellant's assertion in this regard. Second, the BLM has failed to disclose whether or not the upland vegetation on these allotments can sustain the increased use to which they will be subjected while still providing the habitat requirements for sensitive species.

The EAs assert that vegetation in the uplands on these allotments is currently in good condition and a mid- to late-seral successional status, and if not that degraded habitat

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[114] 137 F.3d1372, 1376 (9th Cir. 1998) (holding an EIS inadequate for failing to comply with the National Forest Management Act, failing to consider cumulative effects, and insufficiently discussing mitigating measures)

conditions are not the result of livestock. If true, and this is not established by any Ecological Site Inventories or monitoring of different plant communities, this is likely due to the fact that these areas have received little or no use by domestic livestock because use has been limited to areas around water. Despite this fact, and a large amount of scientific literature indicating impacts to vegetation, especially at the 50% utilization rate proposed in this action, the BLM maintains that there will be no effect on vegetation and rangeland resources in the project area.

This assumption is further complicated by the fact that the BLM has failed to determine the available forage on the allotments and adjust stocking rates within that forage capacity. The best quantitative and peer reviewed range science shows that continued emphasis on structural facilities erroneously called "range improvements" is a flawed strategy. BLM typically proposes these projects rather than making the difficult decision to adjust livestock numbers and seasons to be within the current capacity of the land. Without addressing this issue, the productivity and diversity of the land will continue to fall with the result that the land, the public interest and livestock producers will suffer over the long term.

A review of forage production as it pertains to stocking rates on the allotments is also essential for BLM to comply with NEPA's mandate to take a "hard look" at science and do a thorough and integrated analysis of all disciplines.

In spite of the evidence of widespread loss of plant productivity and ground cover, accelerated erosion and BLM's own documentation of rapid declines in species such as sage grouse, BLM routinely chooses not to address livestock impacts in any scientific or sustainable fashion. Instead, BLM proposes more water developments and grazing systems. This ignores that in the 1960's, BLM began a massive program of developing water, putting streams and springs into pipelines, seeding with crested wheatgrass, building fences, engaging in rotation grazing, and spending millions of dollars to "even out livestock distribution".

An early example of this, among others, was in BLM's Vale District, where millions of dollars were spent on crested wheatgrass seedings and structural range improvements. Today, across BLM lands in the west, many of these systems have fallen into disrepair, the land has failed to recover and we are faced with more and more proposals to install grazing systems, water developments, and seed – not reduce livestock numbers. This is in spite of the fact that long-term studies, including those from the Vale District have shown that stocking rate is the critical variable, not grazing systems.

This is all in the context of BLM's failure to scientifically and accurately determine those lands which are capable and suitable for livestock grazing. We must add to this the further failure of BLM to accurately and quantitatively determine how much forage (i.e. forage capacity) is currently available. On top of this, there is the failure of BLM to properly allocate that forage to watershed and stream protection, wildlife habitat and food, then to livestock if available. Then there is the failure to provide for long-term rest to facilitate recovery.

Finally, we must add the unwillingness of permittees to use peer-reviewed range science principles for management, their strong opposition to the most minimal standards of performance, instead they rely on "snake-oil" solutions such as time-controlled grazing such as advocated by Alan Savory. These failures by BLM and livestock permittees have prevented the recovery of damaged ecosystems in order that they might sustain use as envisioned in the Taylor Grazing Act and FLPMA.

Instead, BLM continues to use the take "half/leave half" principle for livestock use, as is the case in this decision. In its permits and analyses, BLM typically includes livestock use levels of 50% of forage as proper. This was done in the EAs for these permit renewals without providing any scientific foundation for this claim.

Generally, monitoring of use is inadequate in number of locations, it is not timely and, as a result, livestock movements or management are not adequately controlled. The following paragraphs provide a summary of the relevant range science regarding utilization levels, plant growth and productivity, effects of precipitation regime, capability and suitability, capacity determinations, stocking rates and range economics. These principles are well founded in the range science literature, yet they were not discussed in the EAs. Therefore, the EAs violates NEPA.

Much of the current research and analysis of livestock grazing management, plant productivity and economics has come out of the Department of Animal and Range Sciences at New Mexico State University. This work has been presented in a series of textbooks and papers in the range science literature. These references provide analyses of the interactions of livestock stocking rates, plant productivity and economics based on a set of long term grazing management studies from native rangeland types. They provide recommendations for determining livestock grazing intensity to maintain vegetative productivity and economic stability, while taking into account the effects of inherent variation in precipitation in desert ecosystems. The EAs failed to consider production of plant communities during drought years and provide adjustments to grazing management accordingly.

The effects of different livestock grazing intensities on forage plant production was studied in a ponderosa pine type in Colorado as early as the 1940's.[115] This study showed that forage consumption at a rate of 57% produced an average of twice as much forage as a rate of 71%. An area left ungrazed by livestock for 7 years produced three times as much forage as the 71% use area. The authors concluded that, as grazing use increased, forage production decreased. During that same period, Dyksterhuis (1949)[116], in a classic paper on the use of quantitative ecology in range management, presented examples of how stocking rates must be adjusted based on precipitation and range condition, which

[115] Schwan, H.E., Donald J. Hodges and Clayton N. Weaver. 1949. Influence of grazing and mulch on forage growth. Journal of Range Management 2(3):142-148.
[116] Dyksterhuis, E. J. 1949. Condition and management of range land based on quantitative ecology. Journal of Range Management 2:104-115.

included a rating based on departure from the potential plant community. NRCS[117] considers proper grazing management as that management that sustains the potential plant community.

The effects of conservative (30 – 35%) use vs. heavy (60 – 65%) grazing use on grasses and forbs by cattle was determined in a New Mexico study.[118] Both of these pastures had experienced conservative use for over 10 years. In 1997, one pasture was changed to heavy use.

This study showed that heavy stocking rates resulted in serious declines in productivity in the succeeding year. Perennial grass production was reduced by 57% and forbs by 41% in the heavily grazed pasture compared to the conservatively grazed pasture. The authors cited a number of other studies in arid environments that showed heavy stocking rates were accompanied by decreases in forage production when compared to conservative use.

Moreover, after drought, the ability of forage plants to recover was directly related to the standing crop levels maintained during the dry period. **The studies cited showed that grazing during different seasons was less important than grazing intensity.**

Five long-term stocking rate studies from three different locations in Arizona, New Mexico and Utah documented similar patterns.[119] In the Desert Experimental Range in Utah, a 13-year study with moderate (35%) and heavy (60%) use by sheep resulted in annual forage production of 198 lbs/acre and 72 lbs/acre. The authors recommended 25 – 30% use of all forage species. A 10-year study at the Santa Rita Range in Arizona demonstrated that perennial grass cover and yield showed an inverse relationship to grazing intensity, while burroweed, an undesirable species, increased with increasing forage use. The authors recommended a 40% use level.

A 37-year study at the Jornada Experimental range in New Mexico involving conservative (33%) and moderate (45%) use showed that the lower grazing intensity resulted in greater black grama (perennial grass) cover. Lowland areas with high clay content and periodic flooding grazed at moderate intensity had higher cover of Tobosa, a perennial grass, than heavily grazed areas. They recommended 30% be used as a stocking intensity with no more than 40% removed in any year.

A 10-year study at the Chihuihuan Desert Rangeland Research Center looked at four grazing intensities of 25%, 35%, 50% and 60%. Light (25%) and moderate (35%) use produced 70% more forage than 50% use and more than double that achieved at 60% use. Here, the author recommended conservative stocking at 30 – 35%.

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[117] USDA. 1982. Soil Survey of Rich County Utah. USDA Soil Conservation Service, Forest Service and Bureau of Land Management.

[118] Galt, Dee, Greg Mendez, Jerry Holechek and Jamus Joseph. 1999. Heavy winter grazing reduces forage production: an observation. Rangelands 21(4):18-21

[119] Holechek, Jerry L., Hilton Gomez, Francisco Molinar and Dee Galt. 1999a. Grazing studies: what we've learned. Rangelands 21(2):12-16

Hutchings and Stewart (1953)[120], suggested that 25 – 30 % use of all forage species by livestock was proper. They recommended this level because routinely stocking at capacity will result in overgrazing in half the years and necessitate heavy use of supplemental feed. Even with this system, they recognized that complete destocking would be needed in 2 or 3 out of ten years.

Holechek et al[121] concluded that the research is remarkably consistent in showing that conservative grazing at 30 – 35% use of forage will give higher livestock productivity and financial returns than stocking at grazing capacity. They also recognized that consumption by rodents and other wildlife must be taken into account as part of this utilization, otherwise, rangeland productivity would suffer even at these levels of use.

Galt et al[122] recommended levels of 25% utilization for livestock and 25% for wildlife with 50% remaining for watershed protection. In none of these cases have the scientists recommended 50% utilization by livestock, as the BLM proposes in the case of the PRA, and they are clear that even at the lower use levels recommended, allowance for wildlife use must be included in overall use.

BLM has never even looked into the issue of the relationship between its typical riparian greenline stubble height standard of 3 – 4", usually applied to Nebraska sedge, and the effects of applying this standard on adjacent riparian plant community productivity. Carter (1998)[123] showed that before greenline N. sedge had been reduced in height to the standard of 6", riparian grasses had been reduced to 2" stubble height and 89% of stream banks had been trampled, compacted or were actively eroding into the stream.

Monitoring data from the Wasatch-Cache National Forest[124] included the observation that a Nebraska sedge stubble height of 7.6" corresponded to an estimated 70% use of riparian grasses. Lile et al[125], compared clipping of N. sedge to stubble heights of 2" and 4" during early season, late season and multiple clippings to both heights. Late season use or 2" stubble height did not allow recovery.

Only the 4" early season use achieved the 4" criteria, but did not regrow to meet the 6" criteria by the end of the growing season. This shows that season-long or late season use does not allow sufficient time for re-growth and that 3-4" stubble heights measured on greenline sedges are not effective in protecting riparian vegetation.

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[120] Hutchings, S.S. and G. Stewart. 1953. Increasing forage yields and sheep production on Intermountain winter ranges. U.S. Department of Agriculture Circular 925. 63p.

[121] Holechek, Jerry L., Hilton Gomez, Francisco Molinar and Dee Galt. 1999a. Grazing studies: what we've learned. Rangelands 21(2):12-16

[122] Galt, Dee, Francisco Molinar, Joe Navarro, Jamus Joseph and Jerry Holechek. 2000. Grazing capacity and stocking rate. Rangelands 22(6):7-11.

[123] Carter, John. 1998. Investigation of Spawn Creek, Utah Coliform Contamination and Stream Bank Stability in Relation to Cattle Grazing. Willow Creek Ecology report.

[124] USDA. 1993. Monitoring data from the North Rich allotment, Logan Ranger District, Wasatch-Cache National Forest.

[125] Lile, David F., Kenneth W. Tate, Donald L. Lancaster and Betsy M. Karle. 2003. Stubble height standards for Sierra Nevada meadows can be difficult to meet. California Agriculture, 57(2):60-64.

Schulz and Leininger[126] studied long-term riparian exclosures compared to areas that continued to be grazed. They found that, after 30 years, willow canopy cover was 8.5 times greater in livestock exclosures than in adjacent grazed riparian areas. Grasses were 4 to 6 times greater in cover within the exclosure than outside. Mean peak standing crop of grasses within the exclosure was 2,410 Kg/Ha, while outside in caged plots, and mean peak standing crop was 1,217 Kg /Ha.

Often cited, Franklin Crider's study on root growth stoppage from plant top removal provided quantitative measurements of plant re-growth under different amounts of removal[127]. Three mid-west perennial grasses were grown from seed in pots under ideal conditions of watering and fertilization. After sixty days of growth, these potted grasses were clipped once at intervals from 10% to 90% of the above ground biomass. Repeat clippings of the potted grasses were made every two days to return the plants to the same height as the original clipped percent. The experiment lasted thirty three days at which time root growth of controls became inhibited by the size of the pot. Crider concluded that under these ideal growing conditions, if these species of grasses had 40% or less of their aboveground biomass clipped either once or many times, then the net root mass was the same or more at the end of the experiment. This was used to make the assumption that grazing during the entire growing season at 40% or less would sustain plants from one season to the next. This same study has been used to justify the 50% or "take half/leave half" proposition that range managers have used for decades, and the EA under appeal deems adequate for upland habitat protection. Clearly, the long-term range studies cited here show that under actual field conditions, these use levels are excessive, and light grazing (25% or less by livestock) is most appropriate to meet BLM's mandate for sustainable use.

Moreover, these studies highlight the need for the BLM to disclose the impacts to upland vegetation communities that will result from livestock grazing 50% of available forage. The direct impacts to plants from this excessive utilization will have indirect impacts on soils, water infiltration rates, sediment delivery to stream, etc. that were not disclosed in the EAs in violation of NEPA.

Likewise, the EAs do not lay out any strategy for drought. During these adverse precipitation conditions, forage production is reduced, yet the RMP does not analyze actual use by livestock in the past in relation to precipitation to demonstrate that it has employed management guidance or drought standards that de-stock allotments in proportion to the reduction in forage production. In a review of drought effects and management, a Prescott National Forest biologist has shown the need for de-stocking and rest to maintain plant communities during dry and drought conditions and the irreversible loss of soil that can occur.[128]

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[126] Schulz, Terri T and Wayne C. Leininger. 1990. Differences in riparian vegetation structure between grazed areas and exclosures. Journal of Range Management 43(4):295-299.

[127] Crider, Franklin J. 1955. Root-growth stoppage resulting from defoliation of grass. Technical Bulleting No. 1102. USDA Soil Conservation Service. 23p

[128] Staab, Cara. 1996. Effects of Drought on Rangelands. Prescott National Forest Publication.

Without specification of grazing regimes to allow for below normal and drought conditions, sensitive species of native grass such as Idaho fescue, bluebunch wheatgrass and others can lose vigor, productivity and be lost over time unless proper stocking and rest are employed to maintain these plants. Failure to do so is in violation of the impairment provision of FLPMA. Research has provided guidance on this matter. And, because the EAs fail to disclose these impacts, the EAs violate NEPA.

Grazing and rest requirements for key species of grass can be critical. Native cool season perennial bunchgrasses can be very sensitive to defoliation and growing season use. For example, Anderson (1991)[129] stated in regards to bluebunch wheatgrass, "Effects of growing season defoliation injury are well documented: basal area, stem numbers and both root and forage yields are reduced and mortality can be high. … Defoliation to very short stubble heights during the boot stage has been reported to essentially eliminate plants within as few as three years. … Vigor recovery has been found to require most of a decade, even with complete protection from grazing."

The author went on to describe experiments in which a single clipping of the grass during the growing season produced 43% less herbage and 95% fewer flower stalks the following year than unclipped plants. Under a deferred system in eastern Oregon, it was reported that bluebunch wheatgrass could not be maintained at 30 – 40% use in the boot stage (early June). A one time removal of 50% of the shoot system during active growth may require six years' rest even in an area with 17" precipitation.[130]

Anderson (1991) also makes the point regarding bluebunch wheatgrass that, "The belief that range improvement will occur after one or two years of rest following a single season of more than 'light' use during the growing season is erroneous." Mueggler (1975) also determined that Idaho fescue of moderately low vigor required 3 years of rest for recovery and that plants of bluebunch wheatgrass and Idaho fescue in very low vigor may require 8 years and 6 years of rest, respectively for recovery. BLM has failed to consider the recovery, growth and maintenance requirements for these sensitive native grasses.

In addition, grazing affects species composition of plant communities in essentially two ways: 1) active selection by herbivores for or against a specific plant taxon, and 2) differential vulnerability of plant taxa to grazing.[131] Decreases in density of native plant species and diversity of native plant communities as a result of livestock grazing activity have been observed in a wide variety of western ecosystems.

Thurow, Thomas and Charles A. Taylor, Jr. 1999. Viewpoint: The Role of Drought in Range Management. Journal of Range Management 52:413-419.

[129] Anderson, Loren D. 1991. Bluebunch wheatgrass defoliation, effects and recovery – A Review. BLM Technical Bulletin 91-2, Bureau of Land Management, Idaho State Office.

[130] Mueggler, W.F. 1975. Rate and pattern of vigor recovery in Idaho fescue and Bluebunch wheatgrass. Journal of Range Management 28(3):198-204.

[131] Szaro, R.C. 1989. Riparian forest and scrubland community types of Arizona and New Mexico. Desert Plants 9 (3-4): 69-138.

Grazing also can exert great impact on animal populations, usually due to indirect effects on habitat structure and prey availability.[132] Deleterious effects of grazing have been observed in all vertebrate classes. Response of native wildlife to grazing varies by habitat. Bock et al.[133] reviewed the effect of grazing on Neotropical migratory land birds in three ecosystem types, and found an increasingly negative effect on abundances of bird species in grassland, riparian woodland, and Intermountain shrubsteppe (almost equal numbers of species with positive and negative responses to grazing in grassland; six times as many with negative as positive responses in shrubsteppe).

Furthermore, some range managers maintain that livestock are actually necessary for ecosystem health, that "grass needs grazing."[134] These claims are rooted in a scientific debate on the consequences of herbivory on grassland ecosystems. As the "herbivore optimization" hypothesis goes, loss of tissue to herbivores can actually increase total productivity of the grazed plant. Such a response to herbivory is referred to as "overcompensation" by the plant.[135]

When different levels of ecological hierarchy and a wide diversity of ecosystem types, geographic settings, and degrees of management intensity are lumped together into one generalized theory, clarity is lost. Much of the evidence for overcompensation comes from highly productive and intensively managed systems, not from arid rangelands.[136] Few studies have demonstrated overcompensation in western North America,[137] where

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[132] Jones, K.B. 1981. Effects of grazing on lizard abundance and diversity in western Arizona. Southwestern Naturalist
26: 107-115.
Mosconi, S.L., and R.L. Hutto. 1982. The effect of grazing on the land birds of a western Montana riparian habitat. In L. Nelson, J.M. Peek, and P.D. Dalke, editors. Proceedings of the wildlife-livestock relationships symposium. Forest, Wildlife, and Range Experiment Station, University of Idaho, Moscow, Idaho.
Quinn, M.A., and D.D. Walgenbach. 1990. Influence of grazing history on the community structure of grasshoppers of a mixed-grass prairie. Environmental Entomology 19: 1756-1766.
Szaro, R.C., S.C. Belfit, J.K. Aitkin, and J.N. Rinne. 1985. Impact of grazing on a riparian garter snake. Pages 359-363 in R.R. Johnson, C.D. Ziebell, D.R. Patton, P.F. Ffolliott, and F.H. Hamre, technical coordinators. Riparian ecosystems and their management: reconciling conflicting uses. General Technical Report RM-120. Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO.
Wagner, F.H. 1978. Livestock grazing and the livestock industry. Pages 121-145 in H.P. Brokaw, editor Wildlife and America. Council on Environmental Quality, Washington, D.C.

[133] Bock, C.E., V.A. Saab, T.D. Rich, and D.S. Dobkin. 1993*b*. Effects of livestock grazing on Neotropical migratory land birds in western North America. Pages 296-309 in D.M. Finch, and P.W. Stangel, editors. Status and management of Neotropical migratory birds. General Technical Report RM-229. Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, Colorado.
[134] DEIS 4-12
[135] Dyer, M.I., J.K. Detling, D.C. Coleman, and D.W. Hilbert. 1982. The role of herbivores in grassland. Pages 225-261 in J.R. Estes, R.J. Tyrl, and J.N. Brunken, editors. Grasses and Grasslands. University of Oklahoma Press, Norman, Oklahoma.
Owen, D.F., and R.G. Wiegert. 1976. Do consumers maximize plant fitness? Oikos 27: 488-492.
[136] Bartolome, J.W. 1993. Application of herbivore optimization theory to rangelands of the western United States. Ecological Applications 3: 27-29.
[137] Painter, E.L., and A.J. Belsky. 1993. Application of herbivore optimization theory to rangelands of the western United States. Ecological Applications 3: 2-9.

much of the rangeland resource is not grassland. Observations of native herbivores lend no support to the idea that compensatory growth has any relevance at the community level in western rangelands.[138] According to Vicari and Bazely,[139] "there is little evidence that the act of grazing per se increases the fitness of grasses, or any other plant species, except under highly specific circumstances."

The majority of the project area was never a grassland. The native steppe vegetation of much of the Intermountain West, characterized by caespitose bunchgrasses and a prominent microbiotic crust, reflects the absence of large numbers of large-hooved, congregating mammals. These steppe ecosystems have been particularly susceptible to the introduction of livestock; microbiotic crusts are easily damaged by trampling, and they perform important ecological functions like controlling water infiltration and erosion, and fixing nitrogen.[140] The impacts of the loss of these crusts and the subsequent erosion and disruption of nutrient cycling is lacking in the EAs.

The failure of BLM to analyze utilization, stocking rates and precipitation is a failure to meet NEPA requirements for analysis. The failure to provide sustainable utilization rates (we have shown how the levels proposed by BLM are not sustainable and/or are questionable) for herbaceous vegetation, etc. and incorporate those into grazing permits as terms and conditions leaves management uncontrolled and subject to bias, violating FLPMA. And, because the impacts have not been disclosed in the EAs, NEPA is violated.

Any discussion of benefits associated with new grazing systems must be supported with scientific evidence. For example, the EAs claim that the proposed action authorizes proper grazing levels and that the SRH ensures that vegetative communities would be grazed to maintain plant communities. However, there is no disclosure of the past impacts to the areas that received "heavier than normal use" and there is no discussion of the impacts that will result to areas that have received little use. The BLM has admitted it is transferring impacts, but fails to disclose exactly what those impacts are. In addition, adhering to the SHR is not without impacts. The BLM must discuss how effective it is at enforcing the SHR and then disclose how plant communities and wildlife will be impacted, because it has failed this requirement, the EA violates NEPA.

Adherence to the grazing rotation schedule or a 50% utilization rate does not automatically ensure that the applicable standards are being met—as many statements from this appeal and the EAs point out. And, adherence to this schedule does not mean impacts will not occur, but those impacts are not disclosed in the EA. The likelihood that the proposed utilization requirements will work should be disclosed as should the impacts from those measures. While the proposed requirements may be an improvement over historic grazing practices, these stubble heights and utilization requirements are not

[138] Patten, D.T. 1993. Herbivore optimization and overcompensation: does native herbivory on western rangelands support these theories? Ecological Applications 3: 35-36.
[139] Vicari, M., and D.R. Bazely. 1993. Do grasses fight back? The case for antiherbivore defenses. Trends in Ecology and Evolution 8: 137-141.
[140] *Conservation Biology,* Volume 8:3, September 1994, pages 639 - 644

without impacts. Simply referring to the Standards for Healthy Rangelands does not fulfill the requirements of NEPA to disclose the impacts that can be expected to occur in the project area.

In addition, the EAs and FONSIs fail to account for impacts due to trampling of nests and hiding cover for sage grouse during nesting and competition for forage during brood-rearing. Additionally, the EAs and FONSIs lack a discussion of past and cumulative impacts to sage grouse and other species from livestock grazing and other activities in the project area. Just because no sage-steppe or pinyon juniper vegetation treatments are proposed in these EAs does not mean they have not occurred in the past. The EAs must disclose whether or not such activities have occurred and to what extent and then disclose the importance of the remaining habitat to the variety of species that rely on these habitat types and other vegetation communities in the project area.

Finally, the EAs lack any discussion of the impacts to sagebrush and other plant communities that will likely be impacted due to the "better" livestock distribution the BLM is seeking to attain here. Appellant incorporates by reference our comments on the Draft RMP which include a discussion of the impacts to aspen and other communities from livestock grazing.

An EA is rendered inadequate if it fails to include information that is "important, significant or essential" to the issues under consideration. Without the proper disclosure in the EAs of these project's effects and the effects of past management activities on the Allotments, the EAs violates NEPA.

2. The EFO Failed to Update Forage Consumption Rates for Livestock

The BLM, and the EFO in particular, ALWAYS fail to address the site-specific issues regarding forage production during allotment level analysis as is the case with these EAs.

In order to take a hard look at livestock grazing, forage production and carrying capacity of the project area should be justified here at the site-specific level. This is especially important since the BLM failed to do this at the planning level.

NEPA requires that agencies "insure the professional integrity, including scientific integrity, of the discussions and analyses…They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions relied upon in the statement…"[141] The record lacks any indication that the BLM conducted any type of scientifically sound analysis of the appropriateness of the project area for domestic livestock grazing or the appropriate level of such use.

The only conclusion is that the BLM arbitrarily and capriciously decided that the current levels of domestic livestock grazing are appropriate across the planning area, and that decision led to the omission of many reasonable alternatives to the proposed action as well as resulted in a NEPA failure to rely on the best available information.

[141] 40 C.F.R. 1502.24

When were the current levels of AUMs and stocking rates developed? What were the conditions of resources such as forage production, soil productivity, and wildlife populations at that time? These questions deserve an answer if the BLM intends to comply with FLPMA, MUSYA, and NEPA as it must.

Furthermore, 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."[142] In other words, it "prohibits uninformed--rather than unwise--agency action."'[143] Yet, in the case of determining the appropriateness of domestic livestock grazing within the project area it appears that the BLM simply arrived at a predecisional conclusion that such use was appropriate, an action which NEPA and the APA forbid.

The animal unit month (AUM) has historically been used as a unit of forage consumption and the basis of permits and grazing fees for grazing public lands. It is important to ensure that forage consumption rates by livestock are based on the size of animals present on the allotment. This is to insure that stocking rates and grazing periods are more closely balanced with available forage and also provide forage and cover for wildlife and watershed protection. It is also to ensure that grazing fees accurately represent the forage consumed by livestock to ensure the public trust is not violated by undercharging for the actual weights and forage consumption of livestock being grazed.

FLPMA [Sec. 4100.0-5] defines an AUM as *"the amount of forage necessary for the sustenance of one cow or its equivalent for a period of 1 month."* FLPMA [Sec. 4230.8-1(c)] states that *"For purposes of calculating the fee, an animal unit month is defined as a month's use and occupancy of range by 1 cow, bull, steer, heifer, horse, burro, mule, 5 sheep, or 5 goats over that age of 6 months at the time of entering the public lands or other lands administered by the Bureau of Land Management, by any such weaned animals regardless of age; and by such animals that will become 12 months of age during the authorized period of use. No charge shall be made for animals under 6 months of age at the time of entering the public lands or other lands administered by the Bureau of Land Management; that are the natural progeny of animals upon which fees are paid, provided they will not become 12 months of age during the authorized period of use, nor for progeny born during that period."*

This definition in FLPMA avoids dealing with the actual weight and forage consumption of the various animals listed and ignores forage consumption by calves and lambs entirely. Other requirements in FLPMA stress grazing within the carrying capacity of forage within the allotment, the variability of forage production and the need for sustainable use [Sec. 4130.3-1(a); 4100.0-5]. In order to achieve the requirements for sustainable use without impairment, it is critical to align available forage with livestock

[142] Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348 (1989)
[143] Custer County Action Ass'n. v. Garvey, 256 F.3d 1024, 1034 (10th Cir. 2001)

stocking rates. BLM, for example, has typically used 800 lbs/month of forage as the consumption rate for a cow/calf pair while designating a cow/calf pair as an AUM, in conflict with the definition under FLPMA[144]. BLM also does not clarify if this is air dry or oven dry weight.

NRCS, in its National Range and Pasture Handbook, defines an Animal Unit (AU) as one mature cow of approximately 1,000 pounds and a calf as old as 6 months, or their equivalent, then states, *"An animal unit month (AUM) is the amount of forage required by an animal unit for one month".*[145] NRCS further defines the actual forage consumption as 26 pounds of oven-dry weight or 30 pounds of air-dry weight per day as *"the standard forage demand for a 1,000 pound cow (one animal unit)".* This is 2.6% of body weight for oven-dry weight and 3% of body weight for air-dry weight of forage. Note that there is no forage allowance for the calf in this consumption rate. The same would be true for lambs, when considering sheep grazing.

The Society for Range Management (SRM) in 1974 defined an Animal Unit *"to be one mature (1000 lb.) cow or the equivalent based upon average daily forage consumption of 26 lbs. dry matter per day."*[146]. SRM also defined an Animal Unit Month as *"The amount of feed or forage required by an animal-unit for one month."* In its second edition, SRM revised this definition to include an *Animal-unit (AU)* as the forage consumption on the basis of one standard mature 1,000-pound cow, either dry or with calf up to 6 months old as consuming 26 pounds of air-dry forage per day or 780 pounds per month.[147]

Comparing the definitions between NRCS and SRM it appears that SRM has confused air-dry and oven-dry forage amounts. The later SRM definition also clouds the distinction between cow and calf forage consumption, making it appear as if the forage consumed by the calf is included in the daily or monthly amount. A careful reading shows that no forage is included for the calf. A review of some history provides some further insight into animal units and forage consumption.

The University of Nevada Agricultural Experiment Station published a report on cattle production in 1943[148]. That report analyzed 14 years of ranch operation for eleven ranches in northeastern Nevada. At that time, a mature cow was considered one unit and a branded calf or weaner as ½ cow unit, for a combined total of 1.5 cow units per cow/calf pair. Bulls were considered 1.5 cow units. For the period 1938 – 1940, the average turnoff weight (when they left the range) of mature cows was 959 pounds, calves

[144] U.S. Dept. of Interior. 2006. Draft Pocatello Resource Management Plan and Environmental Impact Statement.
[145] USDA Natural Resources Conservation Service. 2003. National Range and Pasture Handbook Revision 1, Chapter 6. Grazing Lands Technology Institute.
[146] Society for Range Management. 1974. Glossary of terms used in range management.
[147] Ortmann, John, L. Roy Roath, and E.T. Bartlett. 2000. Glossary of Range Management Terms No. 6. 105. Colorado State University Natural Resource Series.
[148] Brennan, C.A. and Fred B. Harris. 1943. Fourteen Years Cattle Production and Ranch Earning Power in Northeastern Nevada 1928 to 1941. University of Nevada Agricultural Experiment Station, Reno, Nevada.

were 381 pounds and bulls were 1222 pounds. This means that in the 1930's, a cow/calf pair was 1340 pounds. With breeding, supplements and hormones, weights have increased over time, for example, Anderson et al (ca 2000) calculated a 35% increase in dressed weights per animal between 1975 and 1995.[149]

The 1964 Forest Service R-4 Range Analysis Handbook[150] provided a detailed summary of forage consumption for cattle and sheep as air-dry amounts. This is reproduced in Table 1 of Attachment 2 to this document.

USDA market statistics[151] give the average weights of slaughter cattle for the week ending August 14, 2004 as 1251 pounds. The estimate for the same week in 2005 for slaughter cattle average weight was 1260 pounds. The USDA National Agricultural Statistics Service data for average live weight of cattle slaughtered in 2004 was 1242 pounds compared to 1187 pounds in 1995, or an increase of nearly 8.5% in those 10 years[152]. The Livestock Monitor is a newsletter produced by the North Dakota State University Extension Service Livestock Marketing Information Center in cooperation with USDA State Extension Services[153]. The Livestock Monitor shows for the week ending August 6, 2005, live weights of slaughter cattle averaged 1258 pounds.

The potential weights of mature cows can be even larger than these numbers. For example, NRCS in its National Range and Pasture Handbook, referenced above, defines body condition scores in a range of 1 to 9. A body condition score of 6 which is described as *"Good, smooth appearance throughout. Some fat deposits in brisket and over the tailhead. Ribs covered and back appears rounded."* This body condition score relates to a pregnancy percentage of 88%, which is important as a goal for cow/calf operations as dry cows are usually culled and replaced because the weight gain of calves is important for income. Mature cow weight varies approximately 7 to 8 percent for each unit change in Body Condition Score (range 1 to 9), and extremes in muscling can cause weight to vary as much as 10 percent.[154] Frame size (height) scores show that cows at maturity can weigh much more than 1,000 pounds[155]. Table 3 in Attachment 2 is reproduced from the North Dakota State University publication cited. These figures were for average condition cattle (body condition score of 5). Actual weights will vary due to differences in muscling, body length, condition and other factors. These figures were adapted from a 1991 publication, so represent weights from nearly two decades ago.

Holechek et al (2001) summarized the weaning weights of calves grazed on various types of rangelands at different stocking rates[156]. The data for the period since 1990 produced

[149] http://agecon.uwyo.edu/RiskMgt/marketrisk/TheCattleCycle.pdf
[150] USDA Forest Service. 1964. Forest Service Handbook – R4 Range Analysis Handbook.
[151] http://www.ams.usda.gov/mnreports/SJ_LS712.txt
[152] http://www.usda.gov/nass/pubs/agr05/acro05.htm
[153] http://www.ag.ndsu.nodak.edu/aginfo/lsmkt/monitor.htm
[154] Hammack, Stephen P. and Ronald J. Gill. 1997. Frame Score and Weight of Cattle. Texas Agriculture Experiment Station, Texas A & M University System.
[155] John Dhuyvetter. 1995. Beef Cattle Frame Scores. North Dakota State University Agriculture and University Extension Publication AS-1091 (http://showsteers.com/Frame%20Score%20Chart.htm).
[156] Holechek, Jerry L., Rex D. Pieper and Carlton H. Herbel. 2001.Range Management: Principles and

an average weaning weight of 430 pounds and a range of 382 – 475 pounds. Ray et al (2004) gave a weaning weight of 480 pounds for calves[157]. Using the current market statistics for slaughter cattle at about 1250 pounds and assuming a calf weight of 300 pounds to allow for weight gain during the grazing season, an estimate for the average weight of a cow/calf pair during the grazing season of 1,500 pounds appears reasonable.

As pointed out above, the NRCS used 26 lbs/day of oven dry weight for a 1,000 pound cow and stated this was equivalent to 30 pounds per day air-dry weight. The NRCS Range and Pasture Handbook value of 30 pounds air-dry weight would be 3% of body weight for a 1,000 pound cow. Applying this to the estimate of a current weight of 1,500 pounds for a cow/calf pair, the daily forage consumption would be 45 lbs of air-dry forage per day, or for a month (30.4 days), 1368 pounds of forage per AUM. It appears BLM's 800 pound/month figure for a cow/calf pair is oven-dry weight (26 lb/day). If this is corrected to the 30 lb/day air-dry rate, the forage consumption for BLM's 1,000 pound cow would be 912 lb/month. When this is compared to the 1,368 lb/month above, BLM is understating forage consumption by cow/calf pairs by 568 lb/month**.**

The implication of this on stocking rates is obvious. Based on forage consumption alone, not considering proper utilization, forage capacity and capability factors, BLM is over stocking allotments 33% based on failure to take into account current cattle weights and calves.

The forage needs for domestic sheep must also be determined. Based on current USDA published weights for ewes and lambs, adult domestic sheep weigh from 165 to 440 pounds,[158] and lambs about 129 pounds.[159] Data downloaded from USDA NASS[160] for Idaho, Utah, Nevada and Wyoming for the period 2000 – 2006, show that the average lamb crop is 1.1 lambs per ewe, ranging up to 1.3. According to the American Sheep Industry Association, selective breeding is able to increase lamb birth rates by about 1 – 2% per year, leading to a possible 20% increase in the number of lambs per ewe over 10 years by increasing the number of ewes having twins. Twin survival rates are 1.63 lambs per set of twins[161].

If the low end weight of a sheep at 165 pounds and a lamb at 100 pounds were used and considering that the average lamb crop is 1.1 lambs per ewe, the weight of sheep for a forage consumption calculation would be 275 pounds for the ewe and lambs. The forage consumption rate for sheep given in the 1964 R4 Range Analysis Handbook was 3.3% of body weight per day consumed as air dry forage weight[162]. Thus, the 275 pounds of

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Practices, Fourth Edition. Prentice-Hall, New Jersey. 587p

[157] Ray, D.E., A.M. Lane, C.B. Roubicek, and R.W. Rice. 2004. Range beef herd growth statistics. In: Arizona Rancher's Management Guide. Arizona Cooperative Extension, College of Agriculture, University of Arizona.

[158] http://www.wildlifeprairiestatepark.org/animalpages/domestic_sheep.htm

[159] http://www.usda.gov/nass/pubs/agr04/04_ch7.pdf

[160] http://www.nass.usda.gov/index.asp

[161] Bradford, G. E. 2007. Selection for Reproductive Efficiency. American Sheep Industry Association, Sheep and Goat Research Journal.

[162] USDA Forest Service Intermountain Region. 1964. R-4 Range Analysis Handbook

sheep would consume 276 pounds of air-dry forage per month. As defined in FLPMA above, an AUM consists of 5 sheep, leading to a calculated forage consumption of the sheep permitted by BLM of 1380 pounds of air dry forage per month.

In order to rely on the best available information as NEPA requires, the BLM should recalculate its stocking rates, permitted numbers and grazing seasons based on this updated research. Alternatively, actual counts of animals when entering the allotment combined with body condition scoring and frame sizes could be used to calculate an allotment specific average animal weight and forage consumption for permit adjustments.

None of this information is included in the EAs, nor did the EFO consider stocking rates, forage productivity in the project area, etc. Therefore, the BLM cannot meet the requirements of NEPA for ensuring professional integrity of the assumption that vegetation communities in the project area can sustain the level of grazing proposed. In addition this failure to address stocking rate and AUMs means the BLM has failed to take a hard look at this proposal, and the EA violates NEPA.

3. The EFO Failed to Allocate and Ensure Forage for Wildlife, Wild Horses and Habitat

In addition to the before mentioned failures for sensitive species, the EA for the PRA has failed to calculate the amount of forage and residual plant matter needed for wildlife, wild horses, plant community and watershed protection while it assumes continuing to graze these large numbers of livestock allows forage to exist for big game and other species. These calculations were not conducted for either the current RMP or the new one under development. The BLM must address the forage needs of wild horses since many of these EAs are putting the blame for failure to meet the SRH on these animals. This is the ONLY way to meet the multiple use requirements of FLPMA.

Many of these EAs note that deer and pronghorn populations are declining, yet offer no criteria for assuring that forage and habitat is provided for deer and other wildlife species year-round. The only criteria pertain to critical winter range. No criteria are offered for spring, summer and fall forage needs, which are not predominantly shrubs, but herbaceous vegetation. No evidence of past monitoring or compliance with any of the suggested criteria for wildlife is included in the RMP or combined in an analysis of wildlife populations or habitat quality to ascertain the role of past management of BLM lands has had on these attributes. Therefore, the BLM must do this task here, at the site-specific level, but has failed in violation of NEPA and FLPMA.

For illustration purposes, using the EAs' value of an AUM = 800 lbs of forage per month, then the forage needed to satisfy the 87,800 AUM livestock demand would be 70,240,000 lbs/year. (Of course, if permitted numbers were adjusted to take into account the actual forage consumption based on best available information, that demand would likely be larger). However, using forage consumption rates for mule deer of 3 lbs/day and for elk of 14 lbs/day air dry matter[163], the forage consumed by livestock on the EFO Area would provide forage for 64,000 deer or 13,745 elk annually.

[163] http://www.ams.usda.gov/mnreports/SJ_LS712.txt

The failure of the EAs or the RMPs to provide this analysis or any specific utilization criteria and monitoring means that livestock use and displacement of deer and elk will continue to occur below the radar screen. Decades-old research described below has documented the role of livestock on deer, elk and their habitat.

The EAs do not reveal the inherent conflicts between livestock and wildlife. It does not account for the effects of its failure to accommodate deer and elk during spring, summer and fall. Heavy grazing of mule deer winter range has resulted in a serious reduction or near elimination of the perennial grasses and perennial forbs.

This lack of perennial grasses and forbs creates a serious forage deficiency in early spring and summer when deer prefer the new grasses and then shift to forbs. It is in winter they rely more on shrubs, including sagebrush. During fawn rearing, the combination of inadequate forage on overgrazed spring range coupled with poor winter range is responsible for heavy fawn mortality. The depletion of herbaceous species on summer range by livestock limits reproduction in does.[164]

Hiding cover for fawns decreased more rapidly when cattle were present. This subjects fawns to higher predation rates. When no cattle were present, deer selected more meadow-riparian habitat. When cattle were present, deer selected home ranges with less meadow-riparian habitat. With heavy stocking, deer moved into montane shrub habitat. They also increased the size of their home ranges in the presence of cattle.

While preferring aspen groves when not grazed by cattle, their use fell significantly when cattle were present.[165] In the absence of livestock, deer preferred meadow-riparian habitat. During moderate livestock grazing, deer moved into montane shrub habitat and used aspen habitat only when no cattle were present.[166] Habitat shifts in deer and elk populations occur, placing stress on these wildlife populations.[167] None of these impacts or the forage requirements for big game or wild horses were considered in the EA in violation of NEPA.

4. <u>The EA Fails to Disclose the Impacts from Noxious Weeds and Other Invasive Species</u>

The EAs further violates NEPA by not disclosing the impacts associated with future range developments that will be needed to properly distribute livestock in the uplands. These improvements and the locations of mineral supplements will likely lead to more livestock congregation and sacrifice areas in the uplands and the spread of noxious weeds and non-native invasive species.

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[164] Julander, Odell. 1962. Range management in relation to mule deer habitat and herd productivity in Utah. Journal of Range Management 15(5):278-281.
[165] Pearce, Richard. 1988. Where deer and cattle roam. Forest Research West, Forestry Sciences Laboratory, Fresno, California.
[166] Loft, Eric R., John W. Menke and John G. Kie. 1991. Habitat shifts by mule deer: the influence of cattle grazing. Journal of Wildlife Management. 55(1):16-26.
[167] Kie, John G. 1996. The effects of cattle grazing on optimal foraging in mule deer (Odocoileus hemionus). Forest Ecology and Management 88:131-138.

Some of the recommended grazing systems such as rest-rotation and time-controlled grazing have been found to favor weed growth.[168] Range developments such as water tanks and ponds, and the roads constructed to access them, act as loci for weed spread. These disturbed sites are highly invasible and act as conduits for invasion into surrounding communities.[169]

The EA fails to include or acknowledge these impacts as well as the indirect impacts from weed invasion such as soil erosion, decreased bank stability and the resulting increased sediment delivery to streams, and changes in native plant productivity. Indirect impacts from such occurrences to fish and aquatic habitat and native ungulates are also lacking. This is a violation of NEPA.

Fleischner (1994), Belsky et al. (1999), and Belsky and Gelbard (2000), all highlight how lands within the interior west and great basin are highly susceptible to weed invasions, yet these EAs fail to adequately consider the impacts of livestock grazing on weed spread and the cumulative impacts of other actions such as vegetation treatments, fire, livestock projects like fences, spring developments, pipelines, and practices such as like water hauling and reasonably foreseeable future activities such utility corridors, water corridors, energy development, etc. The habitat fragmentation associated with these activities as well as the potential for cheatgrass and noxious weed expansion is not discussed in violation of NEPA. Please also see Nevada Natural Resources Status Report info Attached.

5. <u>The EAs Fail to Disclose Impacts to Soils and Microbiotc Crusts</u>

The EAs fail to disclose how soils, and microbiotic crusts, and other resources, will be and have been impacted by grazing, especially in regards to areas with stocking levels, new water developments and other facilities, and other components of the management scheme. Actions may shift livestock use into lands that had previously received light or no use opening these soils and crusts to weed invasions and erosion.

Furthermore, the EAs lack any discussion of the past effects of livestock grazing on sensitive soils, how infestations of Kentucky bluegrass have impacted riparian soils on allotments that contain riparian areas, and how this may have led to increased sedimentation to streams, etc.

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[168] Olson, B.E. 1999. Grazing and weeds. Pages 85-97 in R.L. Sheley and J.K. Petroff, editors. Biology and management of noxious rangeland weeds. Oregon State University Press, Corvallis, OR.
Young, J.A. 1994. Changes in plant communities in the Great Basin induced by domestic livestock grazing. Pages 133-123 in K.T. Harper, L.L. St. Clair, K.H. Thome, and W.M. Hess, eds. Natural History of the Colorado Plateau and Great Basin. University Press of Colorado, Niwot, CO.

[169] Rickard, W.H. 1985. Experimental cattle grazing in a relatively undisturbed shrub-steppe community. Northwest Science 59:66-72.
Tolsam, D.J., Ernst, W.H.O. , and Verwey, R.A. 1987. Nutrients in soil and vegetation around two artificial waterpoints in eastern Botswana. Journal Applied Ecology 24:991-1000.

Second, because the BLM has failed to conduct any type of capability and suitability analysis on these allotments (taking into account slope, distance from water, forage production, soil erosion hazard, etc.), calculate forage production, and adjust livestock numbers, it is questionable whether or not soils in the project area can sustain the levels of grazing being proposed.

In addition, the EAs lack any discussion of the erosion potential of soils in the project area, and the current composition of microbiotic crusts.

In addition to compacting soils, grazing by livestock results in alterations in below-ground structure and processes which could potentially influence the adjacent stream ecosystems through changes in root mass, soil structure, infiltration rates, and N turnover rates.[170]

Kaufman et. al., previously cited, notes that soil pore space, and hence water-storage capacity, was significantly different between the grazed and exclosed sites for both dry and wet meadows. In dry meadows, 6% more of the soil volume was comprised of pore space in exclosed sites compared to grazed sites. In wet meadows, soil pore space occupied 12% more of the soil volume in exclosed sites (i.e., 60% and 72% in grazed and exclosed sites, respectively). Rates of net potential nitrification and mineralization were significantly greater in exclosures compared to grazed sites for wet meadows. In the sampled wet meadows, the rate of net potential nitrification was 149- fold greater, and the rate of net potential mineralization was 32-fold greater in exclosed compared to grazed sites.

Infiltration rates were consistently greater in the exclosed sites compared to the grazed sites. In dry meadows, mean infiltration rates were over 11-fold greater in exclosed sites compared to grazed sites (*P*, 0.001). Infiltration rates ranged from 6 to 19 cm/h in grazed sites and from 36 to 283 cm/h in exclosed sites (a mean of 11 cm/h in grazed and 142 cm/h in the exclosed sites). Similarly, in wet meadows mean infiltration rates were over 3-fold greater in exclosed sites compared to grazed sites.

Gifford and Hawkins[171] concluded that infiltration rates in ungrazed areas were statistically different from those in grazed areas at any grazing intensity. Many studies have found that soil compaction increases linearly with increases in grazing intensity.[172] Gifford and Hawkins[173] reported that light grazing reduced infiltration rates to 75% of

[170] Kaufman, J.B. et.al. 2004. LIVESTOCK EXCLUSION AND BELOWGROUND ECOSYSTEM RESPONSES IN RIPARIAN MEADOWS OF EASTERN OREGON. Ecological Applications, 14(6), 2004, pp. 1671–1679

[171] Gifford, G. F., and R. H. Hawkins. 1978. Hydrologic impact of grazing on infiltration: a critical review. Water Resources Research **14**:305–313.

[172] Kauffman, J. B., and W. C. Krueger. 1984. Livestock impacts on riparian ecosystems and streamside management implications. A review. Journal of Range Management **37**:430– 437.

[173] Gifford, G. F., and R. H. Hawkins. 1978. Hydrologic impact of grazing on infiltration: a critical review. Water Resources Research **14**:305–313.

rates in ungrazed areas, and heavy grazing reduced infiltration rates to 50% of rates in ungrazed sites.

Lusby (1970)[174] found that with winter sheep grazing "runoff in ungrazed watersheds was 30% less than in grazed watersheds", and runoff was directly related to bare soil in a watershed.

These are important impacts that should have been considered in the EAs since soils in the project area may be subject to extreme water erosion due to soil make-up and steep slopes that characterize the project area.

Many studies have reported decreased soil bulk density and/or increased soil pore space in sites excluded from cattle grazing.[175]

Kaufman, et. al. further found that if their entire study area was excluded from livestock, the surface 10 cm of soil in a one hectare area of dry meadow excluded from livestock would store 61,000 liters more water than an equivalent grazed hectare. In wet meadows, that number was 121,000 liters. This estimate did not include the entire soil profile. This increase in soil water likely influences ecosystem productivity, soil temperature, biogeochemistry, and stream flows.

Amounts of soils compaction, the risk of future compaction, the level and risk of water table lowering, influences on ecosystem productivity, and other direct, indirect, and cumulative impacts to soils were not disclosed in the EA in violation of NEPA.

6. The EA Fails to Disclose Impacts to Springs and Seeps and Intermittent and Ephemeral Drainages, and Foreseeable and Ongoing Groundwater Depletion and Development

Lands and Waters in the Project Area, as in Willard Creek, and many other areas, are greatly threatened by Las Vegas ground water pumping, utility corridors, and other development. Development includes both water and utility/energy corridors and associated developments. Lands and waters are also greatly threatened by Ely BLM Vegetaton Manipulation/Hazardsous fuels projects.

The BLM has failed to document impacts that have occurred to springs, seeps, wet meadows, and other riparian sites as a result of grazing, range improvements, and other

[174] Lusby, G. C. 1970. Hydrologic and biotic effects of grazing vs. non-grazing near Grand Junction, CO. J. Range Manage- ment, 23(4): 256-260.

[175] Orr, H. K. 1960. Soil porosity and bulk density on grazed and protected Kentucky bluegrass range in the Black Hills. Journal of Range Management **13**:80–86.
Aldefer, R. B., and R. R. Robinson. 1962. Runoff from pastures in relation to grazing intensity and soil compaction. Journal of the American Society of Agronomy **39**:948–958.
Clary, W. P., and D. E. Medin. 1990. Differences in vegetation biomass and structure due to cattle grazing in a northern Nevada riparian ecosystem. USDA Forest Service Research Paper INT-427. USDA Forest Service, Ogden, Utah, USA.

activities. The BLM maintains that livestock watering facilities such as man made ponds actually benefit wildlife. There is ample evidence that livestock loitering around these sites, removing vegetation, and polluting the water are far from beneficial.

Development of springs and seeps removes wetland habitat that is very important to a variety of birds, amphibians, and other species. These impacts must be disclosed. The BLM has completely failed to determine whether or not these impacts will result in significant effects that may need to be mitigated.

Moreover, what the BLM fails to disclose in the EA is that the springs proposed for development and those already developed also provide or at least once provided *riparian* habitat that is important for sensitive species. The BLM is merely proposing to allow less use on land that has been degraded by unsustainable grazing practices and is intending to allow degradation on lands that have not yet been negatively impacted. The EA must disclose how the development of these water sources will impact grouse, amphibians, and other sensitive species in the area.

In order for the BLM to take the required "hard" look at this proposal, it should have considered whether or not adequate water exists in the uplands to sustain the currently proposed level of grazing. Adding additional water facilities and developing springs and seeps is certainly a connected action, is directly related to this proposal and should have been considered if the BLM intended to meet the requirements of NEPA.

Agencies may not arbitrarily carve out or "segment" key decisions or issues that are "connected" or "related," for separate NEPA analysis.[176] Case law has determined that related proposals also must be considered for decision together in a single NEPA document when they are "connected actions" or "cumulative actions."[177] This NEPA requirement prevents the division of a project into multiple "actions," each of which individually might have a lesser environmental impact but which collectively have a substantial impact.[178]

In Thomas, the Ninth Circuit also identified several factors relevant to determining whether actions are connected, including the agency's characterization of the actions, the stated reasons for undertaking the actions, and the timing of the planning for the actions.[179] Closing riparian areas to grazing in the project area will result in the development of more water sources away from streams on public lands in the project area. If it won't, the BLM has an obligation to explain why. The likelihood of these projects being proposed and developed must be disclosed here (NEPA requires the disclosure of impacts at the earliest possible time). These projects are directly related to

[176] Thomas v. Peterson, 753 F.2d 754, 758 (9th Cir. 1985); Town of Huntington v. Marsh, 859 F.2d 1134, 1142 (2d Cir. 1988); Sierra Club v. Watkins, 808 F. Supp. 852, 863 (D.D.C. 1991).
[177] 40 C.F.R. ' 1508.25(a); Save the Yaak v. Block, 840 F.2d 714, 719-21 (9th Cir. 1988).
[178] Thomas v. Peterson, 753 F.2d 754, 758 (9th Cir. 1985); Big Hole Ranchers Ass'n v. U.S. Forest Service, 686 F. Supp. 256, 261 (D. Mont. 1988)
[179] 753 F.2d at 758-60

the action approved here because the riparian areas, which previously provided a large amount of water for domestic livestock, are being closed; the effects of these projects are cumulative, and there is no way for the BLM to ascertain the significance of impacts unless the impacts are disclosed in this analysis.

When multiple proposals for related actions "that will have cumulative or synergistic environmental impact upon a region are pending concurrently before an agency, their environmental consequences must be considered together."[180] Only through such "comprehensive consideration" can the agency properly evaluate alternative courses of action. Id. Thus, "[p]roposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action" shall be evaluated in the same NEPA document 40 C.F.R. 1502.4(a)."

Furthermore, the cumulative impacts of spring developments and other range "improvements" that currently exist in the project area combined with the ones that are reasonably foreseeable are not disclosed in this EA. This includes vegetation manipulation projects.

"Where several actions have a cumulative . . . environmental effect, this consequence must be considered in an EIS."[181] While this NEPA process involved an EA, the requirement still holds. In addition, "`Cumulative impact' is 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. . . ."[182] To comply with NEPA, the BLM must "consider" cumulative impacts.[183] To "consider" cumulative effects, some quantified or detailed information is required. There have been a variety of range "improvements" in the project area in the past, none of which are noted in the EA. This does not meet NEPA's requirement to disclose cumulative effects.

It is known that cattle tend to congregate around a water source whether it is a spring, stream, or trough. Trampled and compacted soils are evident, and vegetation is usually stripped to bare ground. Specifically, the EA failed to disclose and analyze how water quality, soils, vegetation, and wildlife habitat has been affected by these activities. For example, if springs in the project area were developed then it is likely that impacts to amphibians and birds resulted from the improvements. However, neither we nor the decision maker knows this, since the impacts were never revealed in the EAs.

Holechek et al (1998), previously referenced, have shown that areas up to a mile from water developments can have severe impacts from trampling, compaction and removal of vegetation with impacts occurring for several miles. Using the area within one mile of a water development results in an area of approximately 2000 acres potentially suffering severe impacts. The water developments and other range improvements in the project area and those that will most likely be proposed in the future to keep livestock out of the

[180] Kleppe v. Sierra Club, 427 U.S. 390, 410 (1976).
[181] City of Tenakee Springs v. Clough, 915 F.2d 1308, 1312 (9th Cir. 1990).
[182] 40 C.F.R. ñ 1508.7.
[183] 40 C.F.R. ñ 1508.25(c)

closed riparian areas, have the potential to severely impact ecological and watershed condition over tens of thousands of acres. Placing these developments in areas with steep hillsides or narrow canyons (which characterize the majority of the project area as we previously mentioned) can result in severe erosion due to cattle being forced to graze on these steep slopes. The EAs do not disclose the topographic limitations to livestock grazing capacity and suitable areas relative to these developments. They do not disclose the condition of the resources as a result of these developments.

The NEPA documents contain no disclosure or analysis of the expected impacts from these activities or to these resources from cattle grazing. No impacts were noted to wildlife that relies on these water sources. As previously cited, NEPA requires agencies to analyze all past, present, and reasonably foreseeable actions. Yet the BLM failed to analyze the impacts from present livestock developments or those proposed in the future.

Water hauling and wells have similar adverse effects – including creation of new sites of weed infestations, and depletion of water tables in lands with greatly uncertain water demands and foreseeably declining aquifers.

In this instance, if all the existing range "improvements" for these allotments were covered by an environmental assessment(s), then those NEPA documents can be referenced to satisfy our concerns. As courts have warned, "an agency decision to act now and deal with environmental concerns later . . . is plainly inconsistent with the broad mandate of NEPA."[184]

7. The EAs Contain A Flawed Socio-Economic Analysis

NEPA does not automatically require a socio-economic analysis. However, 40 CFR 1502.23 states "...when a cost-benefit analysis is prepared, discuss the relationship between that analysis and any analyses of unquantified environmental impacts, values and amenities." The EAs for these permit renewals fails this standard.

Nearly every EA claims that livestock production is a significant contributor to the economies of the involved counties and the state of Nevada, then references various county plans that supposedly require the BLM to maintain domestic livestock grazing on public lands.

It is clear that the BLM has violated NEPA in this regard. First, the BLM has not provided any data to support its assertion that ranching plays a significant role in the economy of the project area in violation of NEPA's requirement to ensure professional integrity. In fact, we refer BLM to the Bureau of Economic Analysis (http://www.bea.gov) which details that the economies of the majority of these counties do NOT rely on ranching, farming, or agriculture.

[184] Foundation for Wild Sheep, 681 F.2d at 1181; Morgan v. Walter, 728 F.Supp. at 1489.

For example, It is estimated that over 62 percent of Lincoln County's total job base is in service and government related industries. The presence of the Nevada Test Site continues to significantly contribute to Lincoln County employment base.

When comparing to surrounding rural counties, White Pine County employment base is similar to Lincoln County. Both are very similar in terms of economic base diversification which has occurred in the last few years. As expected, the State of Nevada has a strong employment base in the service sector, with many of the jobs created in the entertainment area.[185] This publication also highlights that ranching and farming make up less that 7.3% of the economic contribution to these two counties (2.1% for Nye and 4.8% for White Pine).

Furthermore, while economics can provide a basis for evaluating the various alternatives insofar as the economic evaluation is comprehensive and documents all costs and benefits related to the proposed action, the analysis must include ongoing and future impacts to recreation; all costs related to the project, including costs of preparing the analysis, all specialist support and consultation, costs associated with travel management and administration; costs of road maintenance, weed control, animal damage control, fencing, water and other related improvements.

In order to meet the requirements of NEPA, the EAs should have discussed how much the loss of wildlife habitat, degradation of water quality, controlling noxious weeds, and other impacts associated with domestic livestock grazing have cost the public and will continue to cost as these problems are proliferated by the BLM's failure to correct these degraded conditions.

In addition, the BLM should have disclosed how the grazing allotments in these EAs maximize net public benefit by adequately documenting who benefits from this proposal and its impacts and who really pays for it.

Such as a quantitative market assessment for a variety of priced and non-priced outputs, employment effects on sectors other than grazing (such as those employed in outdorr recreation that is negatively influenced when recreationists encounter fecal contamination in streams, lack of fish habitat, etc.), an economic analysis of detrimental "outputs" such as increased soil erosion and degradation of wildlife habitat, or changes in social and cultural conditions is the only way that the BLM can meet the requirements of NEPA to "discuss the relationship between the analysis and any analyses of unquantified environmental impacts, values and amenities."

The BLM's failure to follow NEPA requirements for economic and social analysis and otherwise ignore legal requirements for economic accountability has resulted in numerous violations of the NEPA described below.

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[185] Buddy Borden, Community Economic Development Specialist Tom Harris, Professor and UCED Director Profile for Lincoln county Nevada January 2004 Fact Sheet-04-28 university of Nevada Cooperative Extension

In addition, the Office and Management Budget developed economic analysis guidelines for all federal programs that apply to "any analysis used to support Government decisions to initiate, renew, or expand programs or projects which would result in a series of measurable benefits or costs extending for three or more years into the future" (OMB Circular A-94, 1992.) The OMB has found that "The standard criterion for deciding whether a government program can be justified on economic principles is net present value." OMB clarifies that federal programs must be justified in terms of net present value to society, not just the federal government or a limited set of affected parties, such as ranchers. (Ibid). OMB Circular A-94 also provides guidance for preparation of an economic efficiency analysis at the project level.

In addition, the BLM has, in its possession, much of the data needed to generate estimates of the economic value of recreation, water, and other uses. This should be included in the EA if the BLM is relying on socio-economic factors, even at a small level, to arrive at a decision for this proposal.

According to NEPA, the BLM must consider socio-economic benefits not only to permittees and local communities, but also to the entire public now and in future generations, who are the ultimate owners and inheritors of this land. In analyzing the full social and economic costs and benefits of the "no-grazing" alternative, the BLM must not under-estimate or fail to estimate the benefits of enhanced ecological services provided by livestock-free and fence-free wildlife habitat, and of enhanced income to local economies from greater visitation by hunters and recreational users. The EAs fail in this regard.

The EAs further fail to include an accurate projection of enhanced hunting and recreational income and non-monetary ecological and social benefits arising from permanent retirement of all livestock use and devotion of the allotments to wildlife and other unique resources. The analysis fails to consider the economic and ecological benefits of redirecting agency resources into habitat restoration.

The EA lacks any indication that the BLM considered the possibly greater income that the current permittees/lessees might gain by going into alternative forms of business, and the improvement in the local economy that might result from such a change.

The BLM should have considered forms of a no-grazing alternative that might involve arranging assistance, transition, or retraining grants or employment preference to help the affected party adjust to the loss of grazing preference and maintain income. Many such programs already exist and analysis of the no-grazing alternative should have taken them into account as opportunities for permittees under no grazing decisions:

- National Forest Dependent Rural Communities grants
- Business and Industry Guaranteed Loans
- Business and Industry Guaranteed Disaster/Emergency Assistance
- Business and Industry Direct Loans
- Intermediary Relending Loan Program

- Rural Business Enterprise Grant
- Rural Economic Development Loan
- Rural Economic Development Grant
- Rural Business Opportunity Grant

Conversely, when estimating the costs of the grazing alternatives the BLM should have factored in the opportunity cost of ecological services, habitat for listed and/or sensitive species and hunting/recreation jobs and revenue to local communities that are partly or wholly foregone under the grazing alternatives. Such estimates must be founded in empirical data or published research not formulae.

The EAs failed to include an accurate and complete accounting of the full financial cost to the public of the grazing alternatives including:
- State tax exemptions or rebates for agricultural businesses and products;
- State motor-vehicle registration and fuel subsidies;
- State tax credits and grants for water developments;
- State funded marketing and promotion of livestock products;
- Federal drought relief and emergency feed programs;
- Federal and State predator control services;
- USDA beef buybacks, price supports, and export-promotion programs;
- Federally funded research and extension for range livestock production;
- Full anticipated administrative and staff costs of conducting NEPA, implementing, monitoring policing and possibly litigating the proposed action and constructing range improvements over the life of the permit.

The BLM failed to develop an explicit budget for implementation, administration and compliance monitoring over the life of the permit for grazing alternatives, to ensure that legal responsibilities under NEPA, FLPMA and the ESA will be met.

Finally, any consideration of the social aspects or "lifestyle and culture" of ranching must be balanced by consideration of the "lifestyle and culture" interests of the far more numerous hikers, hunters, fishers, and professional or amateur mycologists, ornithologists, entomologists, herpetologists, botanists, mammalogists and other zoologists, wilderness lovers and wildlife watchers that frequent and enjoy the biodiversity and landscape of these lands. These are the expressed interests of our members and financial supporters. Through appropriate social survey, the BLM should estimate the actual demand for these services, and how that might change if the allotments were to be freed of livestock operations and left to return to a natural state.

The EAs fail these requirements and therefore violates NEPA.

III. The Proposed Action Violates the National Historic Preservation Act and Archaeological Resource Protection Act

The National Historic Preservation Act and Code of Federal Regulations state that agency officials should ensure that preparation of an EIS and Record of Decision (ROD) includes

appropriate scoping**, identification of historic properties**, assessment of effects upon them, and consultation leading to resolution of any adverse effects. During preparation of the EA or Draft EIS (DEIS) the Agency Official shall:

(i) Identify consulting parties either pursuant to Sec. 800.3(f) or through NEPA scoping process with results consistent with Sec. 800.3(f);

(ii) Identify historic properties and assess the effects of the Undertaking on such properties in a manner consistent with the standards And criteria of Secs. 800.4 through 800.5, provided that the scope and timing of these steps may be phased to reflect the Agency Official's consideration of project alternatives in the NEPA process and the effort is commensurate with the assessment of other environmental factors;

The EAs state that cultural resources may exist on the allotments and that it is the responsibility of the operator to notify BLM if any such resources are discovered. However, it is not the responsibility of the livestock operators to conduct these surveys; it is the obligation of the BLM.

The EAs contain no information from site-specific evaluations, the tribes, or the State Historic Preservation Officer, nor anyone else, and therefore cannot determine whether or not the impacts to historical resources would be significant, would comply with other applicable laws and regulations, or would be acceptable. In fact, once heritage sites are disturbed or artifacts removed from their original setting, cultural information can be lost forever. This constitutes an irretrievable commitment of resources.

It is not new knowledge that grazing activities have a ground disturbing effect. Grazing has the effect of breaking, burying, and removing artifacts. Therefore, these impacts and these sites should have been included in the NEPA document. Simply, referring to BLM files does not fulfill the disclosure requirements of NEPA, nor does it give any kind of expert opinion regarding the impacts grazing has had or will continue to have on these resources.

Failure to disclose impacts is a violation of NEPA. Title I, Section 101(b), "...it is the continuing responsibility of the federal government to use all practicable means... to preserve important historic, cultural and natural aspects of our national heritage..." Under Title I, Section 102(c), federal agencies were to prepare environmental impact statements for each major federal action having an effect on the environment. As courts have warned, "an agency decision to act now and deal with environmental concerns later . . . is plainly inconsistent with the broad mandate of NEPA."[186]

Moreover, the Archeological Resource Preservation Act 36 C.F.R. §296.4(a) states:

"Under section 6(a) of the Act, no person may excavate, remove, damage, or otherwise alter or deface, or attempt to excavate, remove, damage, or otherwise alter or deface any archaeological resource located on public lands or Indian lands

[186] Foundation for Wild Sheep, 681 F.2d at 1181; Morgan v. Walter, 728 F.Supp. at 1489 (NEPA violated where agency unable to determine effectiveness of mitigation measure).

unless such activity is pursuant to a permit issued under § 296.8 or exempted by § 296.5(b) of this part."

The ARPA defines an archeological resource at 36 C.F.R. § 296.3 which states:

"a) Archaeological resource means any material remains of human life or activities which are at least 100 years of age, and which are of archaeological interest.

"(1) Of archaeological interest means capable of providing scientific or humanistic understandings of past human behavior, cultural adaptation, and related topics through the application of scientific or scholarly techniques such as controlled observation, contextual measurement, controlled collection, analysis, interpretation and explanation.

"(2) Material remains means physical evidence of human habitation, occupation, use, or activity, including the site, location, or context in which such evidence is situated.

"(3) The following classes of material remains (and illustrative examples), if they are at least 100 years of age, are of archaeological interest and shall be considered archaeological resources unless determined otherwise pursuant to paragraph (a)(4) or (a)(5) of this section:

"(i) Surface or subsurface structures, shelters, facilities, or features (including, but not limited to, domestic structures, storage structures, cooking structures, ceremonial structures, artificial mounds, earthworks, fortifications, canals, reservoirs, horticultural/agricultural gardens or fields, bedrock mortars or grinding surfaces, rock alignments, cairns, **trails**, borrow pits, cooking pits, refuse pits, burial pits or graves, hearths, kilns, post molds, wall trenches, middens);

"(ii) Surface or subsurface artifact concentrations or scatters;

"(iii) Whole or fragmentary tools, implements, containers, weapons and weapon projectiles, clothing, and ornaments (including, but not limited to, pottery and other ceramics, cordage, basketry and other weaving, bottles and other glassware, bone, ivory, shell, metal, wood, hide, feathers, pigments, and flaked, ground, or pecked stone);

"(iv) By-products, waste products, or debris resulting from manufacture or use of human-made or natural materials;

"(v) Organic waste (including, but not limited to, vegetal and animal remains, coprolites);

"(vi) Human remains (including, but not limited to, bone, teeth, mummified flesh, burials, cremations);

"(vii) Rock carvings, rock paintings, intaglios and other works of artistic or symbolic representation;

"(viii) Rockshelters and caves or portions thereof containing any of the above material remains;

"(ix) All portions of shipwrecks (including, but not limited to, armaments, apparel, tackle, cargo);

"(x) Any portion or piece of any of the foregoing."

The EFO does not have, and never has had, a permit to damage the archaeological resources located on the public lands in the project area. The BLM admits that archeological resources may be located in the project area, knows that livestock trample and destroy these artifacts, and yet continues to allow the activity even though the law prohibits it.

V. The EA and FONSI Violate the Administrative Procedures Act (APA)

The Administrative Procedures Act (APA)[187] prohibits an agency from acting in an arbitrary and capricious fashion. Fair and honest procedures are also an element of complying with NEPA.[188] To assure that a fair discussion occurs, agencies are required to obtain high quality information, including accurate scientific analysis.[189] The regulations are very explicit that: Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements.[190] CEQ regulations also require that: Environmental impact statements shall serve as the means of assessing the environmental impact of proposed agency action, rather than justifying decisions already made.[191]

In the EAs for the permit renewals on the EFO the BLM arbitrarily and capriciously predetermined the "scope and intensity of the grazing authorization proposed" while failing to consider reasonable alternatives to the proposed action in violation of NEPA. The BLM must first consider whether or not livestock grazing is appropriate in the project area and then determine the "scope and intensity" of such use that the land can handle on a sustainable basis. The BLM failed to do this because it arbitrarily and capriciously predetermined the level of grazing that it would allow in the project area and then tried to justify that action by claiming it didn't have to analyze other alternatives in the EA.

[187] 5 U.S.C. 706(2) (A)
[188] 40 C.F.R. 1502.1
[189] 40 C.F.R.1500.1 (b)
[190] 40 C.F.R. 1502.24
[191] 40 C.F.R. 1502.2(g)

Furthermore, the EAs, FONSIs, and Notices of Final Decision violate various laws and regulations as highlighted throughout this appeal. The APA[192] declares that "The reviewing court shall hold unlawful and set aside any agency action, findings, and conclusions found to be (a) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." Since the decision is not in accordance with the laws and regulations as pointed out in the statement of reasons, the EAs, FONSIs, and Final Decisions violate the APA.

Relief Requested

As shown in the Statement of Reasons, the EA, DN, and FONSI for the on the Ely Field Office contains significant deficiencies, arrives at inaccurate conclusions, and violates numerous federal and state laws and regulations. WWP hereby requests a full remand of the Final Decision, FONSI, and EA for further analysis.

Appellant has shows that this FONSI is not justified, and due to the impacts created by domestic livestock that the EA and this appeal document, we request that the BLM be directed to develop an Environmental Impact Statement (EIS) that takes into account all cumulative impacts from these livestock operations in combination with other projects throughout the project area.

Since this activity violates the NEPA, FLPMA, and the APA and other laws and regulations detailed throughout this appeal, we request that the Ely Field Office Manager be required to develop a new EIS that complies with all applicable laws and regulations.

[192] 5 U.S.C. §706 (2)

Additionally, we request that the BLM be required to select an alternative for the permit renewal that contains a monitoring program which includes goals, standards, and methods. The monitoring program should include a schedule and have enforcement steps clearly defined, and it should be funded by the BLM and conducted by BLM personnel rather than relying on the untrained observations and judgments of the permittee.

PETITION FOR STAY

Pursuant to 43 C.F.R. §§ 4.21 and 4.471, WWP hereby petitions for a stay of the challenged decision. WWP respectfully requests that a stay be granted until the appeal is resolved.

I. The Relative Harm to the Parties Favors Issuance of a Stay.

WWP and its members, who actively recreate on the public lands on and surrounding the Allotments will be harmed if this final decision is permitted to proceed. Implementation of this decision will result in a violation of federal laws and regulations as documented in the Statement of Reasons, as well as the loss of the ability of WWP and its members to experience the land in question without viewing and experiencing ongoing degradation of important public resources and values. If this flawed decision is implemented, the losses to the public will be significant and may be long-term and/or irreversible. This runs directly counter to FLPMA's requirement that the BLM manage the public lands in a manner "that will best meet the present and future needs of the American people" and "without permanent impairment of the productivity of the land and the quality of the environment." 43 U.S.C. § 1702(c). (emphasis added). If the BLM is permitted to proceed with its unlawful final decision, this would allow the agency to avoid its duty to "prevent unnecessary or undue degradation of the lands." Id. § 1732(b).

Most significantly, the decision approves the renewal of domestic livestock grazing permits that will result in trampling, compaction and erosion of soils, and disruption and degradation of critical sage grouse, pygmy rabbit, and other sensitive species habitat and movement, and continued degradation of water quality in violation of the CWA. These impacts will necessarily adversely impact and disturb values in an area in which WWP's members have an interest. Although grazing has been occurring on these allotments for decades, the adverse environmental impacts that result from the renewal of these permits may be long-term and/or irreversible. This includes the continuation of status quo grazing numbers and levels of use when fewer livestock may have been warranted.

Losses of soil, native vegetation and native wildlife habitat are irreparable, and continuing to contribute to these losses by renewing this permit, and others across Idaho without adequately considering the impacts and needs of wildlife, particularly sensitive species, pushes these species closer to listing. By failing to consider reasonable alternatives to solve the problem at issue—continued riparian degradation and overuse from livestock grazing—the BLM's decision also harms WWP because the agency has summarily refused to consider viable options such as reduced grazing (numbers and/or

periods of time). Yet, the BLM simply refused to consider them. As a result, WWP's interests are directly harmed. The result of issuance of a stay of this decision will be the prevention of direct harm to WWP, its members and their interests because of the violation of federal statutory and regulatory provisions on which WWP relies.

Conversely, the relative harm to the BLM, should the OHA grant the requested stay, is minimal to nonexistent. The BLM has not proposed any new direction with the approval of these decisions, thus, grazing in the 2008 grazing season will continue under the proposed terms regardless of whether this project is granted a stay. Thus, there is no immediate or emergency need for the BLM to renew these permits until an adequate NEPA analysis has been conducted—something the BLM could surely do before the start of the next grazing season.

Furthermore, if a partial stay is not granted, the BLM would be allowed to proceed with a project that has been developed and approved in contravention of federal law. This will cause potentially irreparable harm to the public lands involved, as described above.

Although the BLM may argue that a stay would harm the permittees and allow the further damage to resources without implementation of the guidelines of the Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management, we have already stated in this document that the BLM is required to comply with these S&Gs regardless of whether or not this project is approved. Furthermore, this is not a sufficient reason for moving forward with a project that may well cause similar or further damage to other parts of the allotment and other important multiple-use resources. Grazing activities and permanent alterations of these public lands and high desert landscapes would continue, and unless the BLM is honest and discloses all of the impacts of this proposal the decision maker and the public cannot guarantee that the approved action will not result in further significant harm if a stay is not granted. At most, a stay will require the agency to hold off on permit renewal until this appeal can proceed on the merits and potentially until the agency prepares a fully-informed analysis and decision as required by NEPA—and one that will avoid causing "unnecessary or undue degradation," as required by FLPMA.

II. Appellant's Likelihood of Success on the Merits Favors Issuance of a Stay.

WWP has established that it likely will succeed on the merits of this appeal based on the BLM's: (1) failure to ensure that the project will meet or make significant progress towards meeting the ISRH; (2) failure to take a "hard look" at the impacts of currently unsustainable grazing practices; and (4) failure to adequately consider the direct, indirect, and cumulative impacts of the proposed action. By failing to satisfy these essential NEPA and FLPMA requirements, the BLM also has made a decision very likely to result in "unnecessary or undue degradation" and "permanent impairment" of the public lands, and one that fails to demonstrate the agency undertook a balanced and informed multiple-use analysis. As explained in WWP's Statement of Reasons, this violates FLPMA.

III. The Likelihood of Irreparable Harm Favors Issuance of a Stay.

The harm that will result from implementation of the BLM's final decision is irreparable in that it will allow purposeful degradation of public resources. Renewing these permits will continue the legacy of livestock grazing that has fragmented and destroyed sage-steppe wildlife habitat, lead to invasion and spread of noxious weeds to the detriment of native plant species, could push species such as the pygmy rabbit and sage grouse closer to listing because the BLM has failed to consider the needs and cumulative impacts of its management activities across the state on these species, and further degradation of water quality in violation of the Clean Water Act. Losses of soil, native vegetation, and native wildlife habitat, as well as degradation to the wildlife habitat resources and water quality, are irreparable.

Moreover, implementation of this project without fully analyzing reasonable alternatives such as reduced grazing and reduced seasons of use will leave these fragile high desert landscapes susceptible to the same type of severe resource degradation that led the BLM to propose changes to the terms and conditions of these permits.

Because the BLM intends to issue these permits in order to continue to authorize the same unsustainable numbers of livestock and levels of grazing, there is a very real possibility that the degradation documented by the BLM will continue—and without engaging in a fully informed analysis as to the impacts of these proposed management changes on resources and wildlife habitat. It is well-established that "[a]bsent unusual circumstances, injunctive relief is the appropriate remedy for a violation of NEPA."[193]

Finally, WWP and its members will be deprived of the opportunity to enjoy thriving wildlife populations in intact natural habitats, including healthy and thriving populations of special status species such as sage grouse, and pygmy rabbits. Instead, WWP and the public will be faced with the very real potential for additional acreages of flourishing exotic (plant) species invasions in areas not previously disturbed by over-grazing or weed invasions, as well as declining wildlife populations as their habitat continues to become fragmented by increased weeds and new "range improvement" physical barriers, and continued unsustainable use levels and associated ecological problems. If allowed to continue, these impacts will never be fully recoverable and therefore represent, through the loss of existing soils, native vegetation, wildlife habitat, and special status species, an irreparable action on the part of the BLM that will harm the environment and the ability of WWP to carry forward a legal contest of this decision, once it is in place.

IV. The Public Interest Favors Issuance of a Stay.

Finally, the public interest favors granting the requested stay. The significant sage-steppe and other arid lands habitats and special status species, and other important resources will be degraded irreparably if the BLM is allowed to implement its final decision. This is not in the public interest. Rather, recovering the health of these public lands and resources,

[193] EPIC, slip op. at 26–27 (granting injunction and citing Forest Cons. Council v. U.S. Forest Serv., 66 F.3d 1489, 1496 (9th Cir. 1995)).

and ensuring fully-informed, balanced multiple-use decision-making in compliance with NEPA, FLPMA and other federal laws, is in the best interest of the public.

In addition, the public interest as expressed by Congress in NEPA and FLPMA will be harmed if the BLM is permitted to act in contravention of federal laws and regulations intended to protect public resources.[194]

CONCLUSION

WWP believes the granting of a Stay in this matter clearly serves the interest of the health of ecosystems, native biota and the public on these Nevada public lands. Therefore, WWP respectfully requests that the Petition for Stay be granted.

Respectfully,

Katie Fite
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Western Watersheds Project
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Boise, ID 83701

[194] See, e.g., Seattle Audubon Soc'y v. Evans, 771 F. Supp. 1081, 1096 (W.D. Wash. 1991) (agency violation of statute "invokes a public interest of the highest order: the interest in having government officials act in accordance with the law"); Sierra Club v. Lujan, 716 F. Supp. 1289, 1293. (D. Ariz., 1989) (where environmental laws have been violated and harm to environment is imminent, "[t]he public interest is obvious" and an injunction should issue); Patriot v. U.S. Dep't of Housing and Urban Dev., 963 F.Supp. 1, 6 (D.D.C. 1997) ("the public interest is best served by having federal agencies comply with the requirements of federal law").

CERTIFICATE OF SERVICE

I, Katie Fite, Hereby certify that on ___ the foregoing document will be served, via to:

Office of the Solicitor

Ely Field Office Manager
Bureau of Land Management

Copies of the Appeal will be sent to Permittees and Interested Publics on list supplied by BLM.