Western Watersheds Project

Boise, Idaho Office
PO Box 2863
Boise, ID 83701
Tel: (208) 429-1679
Fax: (208) 342-8286
Email: Katie@WesternWatersheds.org
web site: www.WesternWatersheds.org

Working to protect and restore Western Watersheds

February 9, 2006

Bureau of Land Management
Nevada State Office
Attn: Brian Amme, Weed EIS Project Manager
1340 Financial Blvd.
PO Box 12000
Reno, NV 89520-0006
vegeis@nv.blm.gov

Same as EMC0584

Dear Brian,

Here are additional comments of Western Watersheds Project on the BLM's Draft Vegetation Treatments on BLM Lands in 17 Western States EIS incorporate by reference scoping, and comments provided at public meetings.

LIVESTOCK GRAZING AS A CAUSAL AGENT IN FIRE, FUELS, VEGETATION "PROBLEMS"

The Draft EIS fails to adequately address the role of livestock, and BLM and other agency management of livestock, on the ecological health and fire regime of lands across the Project area. It fails to present scientific information and analysis necessary to understand the role of livestock in causing fuels problems – including the role of ongoing livestock grazing across the lands of the EIS area and adjoining National Forest, state and private lands.

The EIS and alternatives are based on BLM's false premise that it can impose fire and other treatments to bring about "historical" ranges of fire occurrence and achieve some artificially derived "desired" future conditions. This is not based on the hard, cold facts that cattle and sheep grazing and other human disturbances in the arid West have created an UNNATURAL environmental setting – often with massive topsoil loss, lowered ecological site potential, desertification, and great vulnerability to weed invasion following disturbance. The risk of alien invasive species dominance of sites following BLM's proposed disturbance treatments interjects great risk into BLM's claims that it can restore lands by inflicting large-scale new disturbances.

In this setting, BLM's premise that chaining, fire and other disturbance will have beneficial outcomes, especially with no significant changes in land management (reduced grazing, roading, other continued sources of degradation) is unrealistic and not based on either common sense or scientific reality.

BLM must recognize the deficiencies of livestock grazing and other allocation components of Land Use Plans, and their role in contributing to hazardous fuels, weeds and other ecological problems. The livestock grazing and vegetation portions of many Land Use Plans are woefully outdated. New Land Use Plans ignore (example, Craters of the Moon, Black Rock) fail to address forage allocations in any way. There is no management requirement for conservative use levels, no specific new or updated allocation for livestock, no concrete habitat goals related to livestock use, and BLM continues to apply known harmful levels of vegetation use.

Most of the old plans view threatened native sagebrush vegetation communities as "brush", primarily suitable for burning, spraying and discing up. The new plans fail to include necessary management guidance such as stubble height standards necessary for riparian protection, utilization levels necessary for successful sage grouse nesting, or grazing systems that protect microbiotic crusts necessary for soil health and keeping cheatgrass and other weeds that cause a fuels problem from invading. LUPs lack certainty, and especially newer plans lack application of specific use standards. All plans fail to address disturbance such as livestock trampling, and lack quantified trampling standards.

As management on the ground over the course of the EIS/PER will be carried out under out-dated old plans, and new plans with often even fewer standards and that do not address forage/stocking allocations, we believe it is not possible for BLM to predict rosy short, mid or long-term outcomes to its proposed treatments.

Neither the old or new Land Use Plans provide for protections necessary to slow down or halt weed invasions with associated alterations/shortening of fire cycles in areas invaded by annual bromes or other flammable weeds. The current scientific literature overwhelmingly shows that livestock grazing is a primary cause of problems affecting native vegetation, including altered fire frequencies and altered fuel situations.

An EIS grappling with weeds, and fire, fuels and vegetation treatment must address livestock grazing as a causal agent; analyze the impacts of livestock grazing in continuing to cause "unnatural" fire cycles and weed problems; honestly assess the impact of chronic livestock grazing on the ultimate outcome/effectiveness/success of any treatments; develop a range of alternatives that minimizes livestock and other disturbances as prevention and part of an Integrated Pest Management Strategy. Without including significant changes in livestock grazing practices including reduced stocking rates and/or removal of livestock from lands at risk to cheatgrass/weed invasion or dominance, or where restoration actions may be undertaken, and more protective levels and standards of use, BLM will be wasting taxpayer dollars on this Fire EIS effort.

BLM must fully address livestock as a causal agent in ecosystem disruption, and alteration of composition, structure and function of native ecosystems in the arid lands (see Fleischner 1994) covered by the EIS. The role of livestock in causing any fuels problem must be fully assessed, including all direct, indirect and cumulative impacts of past and ongoing livestock use on rangeland health problems associated with fire,

hazardous fuels and weeds. A wide range of up-to-date livestock management alternative components must accompany all alternatives in this EIS process. These should include analysis of a range of reductions in stocking rates and use levels, and their effects on ecosystem processes, fire, fuels, weeds, restoration, rehabilitation efforts.

BLM must fully analyze reductions in, or cessation of livestock use and grazing permit retirement as part of any treatment analysis that is conducted. Federal fire funds should be used to buyout and retire grazing permits on lands that are treated and where subsequent grazing will result in new weed problems, or still-intact lands determined to be at risk to weed invasion, or determined to be at risk of crossing thresholds from which recovery may not be possible. The inextricable linked fire/fuels problems and livestock grazing effects must be addressed.

Background information that must be presented and assessed includes:

- Current stocking rates (average actual use as well as active permitted use) in all allotments, and in all vegetation types and all lands where Field Offices slated treatment in information used to form the basis of this EIS/PER;
- Utilization levels and other management standards applied on the affected lands vs. current range science texts
- Current ecological condition of soils, vegetation, habitats related to stocking rates, levels of use allowed, etc.

See also additional WWP comments submitted separately.

ADEQUATE BASELINE INFORMATION ON VEGETATION COMMUNITIES MUST BE COLLECTED

Unfortunately, the Draft EIS does not provide adequate information on vegetation communities in the affected lands and their surroundings.

BLM must collect and analyze extensive baseline information on past fire and vegetation conversion or manipulation projects in the affected lands in each vegetation type identified in the DEIS/PER, and the effects of these treatments on wildlife corridors, habitat fragmentation, likelihood of human-caused fires or disturbance, etc. Data and maps must be compiled and assessed that indicate where all past treatments have been conducted. Without understanding the past dispersion and impacts of treatments and disturbance across the landscape, BLM can not adequately assess the impacts of various alternatives related to treatment and land health.

Information that needs to be acquired and assessed includes data and maps of:

- Past disturbance events on these lands (fire- prescribed or wild, chemical treatment, mechanical treatment – chaining, cutting, etc.);
- Seedings or any other post-disturbance treatments that have occurred and their current condition

- Condition of treatments and seedings, including cheatgrass and other fine fuels and weeds in interspaces
- Impacts of all livestock facilities
- Impacts of roading, and roading links to past treatments or livestock or other land uses.

Assessment should include a valid study of the current ecological condition and health of soils, vegetation, important wildlife habitats and other important values of the affected lands, a comparison between these conditions and conditions at the time of the disturbance.

For all lands where treatments have been identified by BLM Field offices, BLM must collect current information on: Vegetation species composition, its current ecological condition; livestock grazing regimen and standards of use; wildlife habitats and populations occurring here. Information on periods of rest, trespass, and other livestock factors must be included.

Current information on ecological condition, presence of weeds and other exotic species, etc. on all lands within the project area must be collected as part of this effort. It must be the basis for decisionmaking on "acres to be treated" for various purposes in the EIS.

For example, how many acres of salt desert shrub communities, Wyoming big sagebrush, or other communities have a significant component of cheatgrass in the understory? How many of these lands have already crossed thresholds, where succession is truncated? How many are at risk of crossing thresholds? How many acres, and what is the location, of each vegetation type is in good or better ecological condition?

After solid, on-the-ground collection of new information, BLM must develop a rigorous protocol for determining all lands in need of "treatment", and explain in comprehensive detail, with supporting science, why these lands need treatment.

We are alarmed that BLM in the EIS avoids focus on treating the extensive crested wheatgrass and other seedings that have so altered and largely destroyed wildlife habitats, and which often form the basis of stocking excessive numbers of livestock that also affect native vegetation in or near these seedings. Many crested wheatgrass seedings that resulted in the aftermath of past treatments have become infested with cheatgrass, halogeton or other weeds and now contain continuous fine fuels. In many seedings, exotics such as crested wheatgrass have been planted at unnaturally thick densities, and thus present an increased fire risk, or have significant components of cheatgrass in understories. Large wildfires sweep across such seedings - as in the 2005 Clover fire in the Jarbidge Field Office.

The harm and fragmentation of native species habitats caused by these seedings must be assessed – as it is important to in understanding their role in habitat fragmentation on top of the extensive alterations of habitat proposed by BLM under the DEIS/PER. Both the Jarbidge and Burley BLM lands provide a perfect example of a woefully fragmented

landscape where crested wheatgrass seedings have greatly fragmented sage grouse habitats across middle to lower elevations, and many are in very poor condition and have rampant cheatgrass, halogeton and other problems – as well as loss of forage.

Yet, in Burley,BLM persists in promoting the killing of native vegetation (junipers, mountain big sagebrush, pinyon, and other species) in the Jim Sage and other areas, while ignoring the habitat loss, and weed and fire risks, posed by the crested wheatgrass and other purposefully altered lands, including those BLM itself "treated" with fire and which have become weedlands. The Weed EIS/PER continues blindly down this same path.

BLM, simultaneously with the Weed EIS/PER is developing other EISs – such as the Upper Snake River District Fire, Fuels and Related Vegetation Management Plan Amendment. We attended that EIS Scoping meeting held in Boise, and just like the Weed EIS, BLM had no sound basis for estimates of acres proposed to be treated in the information that was provided to the public. We were told that BLM asked land managers in each field office to come up with estimates. However, there was no protocol followed as a basis for these estimates, and it appears no scientific methodology was followed. Our review of the USRD Draft EIS confirms that a systematic method to assess treatment "need" has not been used. Thus, not only does the Programmatic Weed EIS/PER not rely on, or provide, current ecological information necessary to make science-based decisions on public lands, neither do the lower level EISs that will tier to it.

Fire's Natural Role. The EIS must base its analysis on science, and not the mis-begotten hope that fire/other treatment disturbance will not result in harmful outcomes in many of the highly disturbed systems here. This is key to understanding that many of the predicted results are not attainable – especially if large-scale chronic disturbance factors like grazing continue unabated, and spread cheatgrass and weeds in their wake.

The EIS's discussion of vegetation communities and treatments ignores honest assessment of alterations in ecosystem composition, function and structure that exist in the real world as a result of livestock grazing and other disturbances, past vegetation treatments followed by livestock grazing, etc.

ECOLOGICAL RISK ASSESSMENTS FOR TREATMENTS MUST BE CONDUCTED

ICBEMP assessed lands and categorized them "at risk" to weed invasion. This EIS effort can build on that, and take a much more detailed look at the lands affected by this proposal. Shockingly, ICBEMP also found that only a very small portion of the entire Interior Columbia Basin had even "moderate" ecological integrity (PNW-GTR-385 at 118, Map 18). Large areas of lands are in "Low" ecological condition.

The DEIS/PER fails to provide information to tie proposed treatments to such land areas, and fails to assess the role (and ecological condition) of past treatments past and current livestock management (especially under out-dated paradigms and levels of use), and develop new goals, objectives and allocations that better address the pressing habitat

needs of many important species and that address root causes of hazardous fuels problems, and thus provide better and more cost-effective protection from hazardous fuel and weed problems. What are the risks of treating wild lands, as BLM proposes, under the current alternatives, or under a new range of reasonable alternatives?

SUITABILITY OF LANDS FOR TREATMENT – WILDERNESS, ACECs, ROADLESS LANDS

We are very concerned about the lack of necessary analysis of the impacts of the various alternatives on: the integrity of ecosystem processes and natural values within WSAs, wilderness and other roadless lands; the relevant and important values of ACECs; the biotic integrity and values to society and watersheds of undeveloped and roadless lands; the values of Special Recreation Management Areas and all lands where the public seeks wild or untrammeled natural landscapes. BLM's proposal will cause irreparable harm to values ranging from recreational, spiritual and aesthetic values, to unroaded watersheds that do not release road sediment to streams.

CAPABILITY AND SUITABILITY OF LANDS FOR LIVESTOCK GRAZING

In many areas of BLM lands across the West, sheep AUMs have been converted to cattle AUMs, with no necessary reduction in AUMs, and no examination of the impacts of sheep vs. cattle use, and the often decreased capability of steep, rocky or other terrain for cattle use (vs. sheep).

This capability and suitability of lands for livestock grazing must be assessed as part of any treatment this process. Please see USFS methods used in development of the Boise, Payette and other recent southern Idaho Forest Plans.

BLM regularly fails to employ analytical procedures described by Professors Holechek, Galt and others, and which the Forest Service uses in its grazing management, in setting stocking levels by first determining the amount of land area that is both "capable" and "suitable" for grazing.

Under the "capability" analysis, an evaluation is made to determine the number of acres of lands that are "capable" of livestock grazing, based on specific slope, distance from water, rockiness, and other factors. Then, out of the "capable" lands, a further determination is made about which acres are "suitable" for grazing, based on considerations such as special management areas, fragile ecological resources, or other considerations. After this analysis is done, then the remaining lands that are both "capable" and "suitable" are assessed to determining grazing levels by setting proper stocking rates. This analytical process is central to ensuring a proper grazing management system that does not degrade resources, and must be considered as part of the determination under various alternatives of the impacts or effects of the outcomes of any of the many large-scale disturbance treatments of fuels or weeds across vast acres that BLM is proposing in the EIS.

BLM must determine if stocking of grazing lands that are not capable or suitable is a major contributing factor to fuels and weeds problems.

All alternatives must include provisions for regulation of livestock disturbance based on current science and current capability and suitability determinations. This includes science-based standards of use, such as 25% or less allowable utilization of upland vegetation, no grazing during critical growing periods for native species, no grazing during nesting periods for migratory birds and sage grouse, measurement of livestock trampling damage to native vegetation and microbiotic crusts and means to minimize trampling damage, no movement of livestock from lands infested with exotics to more intact communities.

BLM MUST EXAMINE USE LEVELS, AND THEIR ROLE IN FUELS PROBLEMS

BLM does not take into account the scientific literature – including that published in the Journal of Range Management – demonstrating that utilization limits historically followed by BLM (typically, 40%, 50% or 60% utilization limits) contribute to degradation of native vegetation, and plant community changes that result in fuel and weed problems, and other ecological problems affecting a host of important habitats. These ecological problems include disturbance and loss of soils and microbiotic crusts that results in extensive weed problems. See Anderson 1991, Anderson and Holte 1981, Anderson and Inouye 2001, Belnap 1995, Belnap and Gillette 1997, Belnap et al. BLM Tech Bull. 2001, Belsky and Gelbard 2000, Beymer and Klopatek 1992, Braun 1998, Connelly et al. 2004, Donahue 1999, Fleischner 1994, Freilich et al. 2003, Galt et al. 1999, Galt et al. 2000, Gelbard and Belnap 2003, Hockett 2002, Holechek 1996b, Holechek et al. 1998, Holechek et al. 1999 a and b, Holechek et al. 2000, Holechek et al. 2001.

FULL RANGE OF PASSIVE TREATMENTS MUST BE EVALUATED

Passive treatments primarily minimize site disturbance, and generally remove or minimize an environmental irritant that is affecting the health of the plant community. Thus, they have less risk of soil erosion, weed invasion or proliferation and other negative impacts associated with them. They also have a high probability of being beneficial to watersheds, native wildlife habitats and populations and the economic well-being of western communities that are increasingly dependent on tourism and recreational uses of public lands.

An array of passive treatments (provided to BLM in the RNEA) exist that will enable BLM to treat many of the affected lands. Such treatments, wrongfully ignored by BLM, includes:

Livestock grazing treatment: Livestock grazing treatments can reduce spread of flammable invasive species, heal damaged understories so that more natural, cool-burning fires can occur, and reduce the proliferation of doghair thickets of dense young trees which serve as ladder fuels. Treatments include significant reductions in livestock

numbers accompanied by prudent utilization and trampling standards in plant communities found to have damaged understories vulnerable to invasion by flammable exotic species.

Closure of pastures with known invasive species infestations. Closure of lands to grazing that have known exotic species infestations is a prudent first step toward control of spread of flammable, watershed-altering exotics.

Closure of pastures "at risk" to weed invasion – such as any Wyoming big sagebrush, Basin big sagebrush, or juniper communities that still contain relatively intact understories. This EIS process should map and identify such areas, as well as all areas where cheatgrass already dominates the understory.

Livestock removal treatment: Grazing permit buyout and permit retirement using federal fire funds is a very reasonable treatment that will heal damaged lands, help restore natural fire cycles, minimize the spread of exotics and other hazardous fuels.

Livestock facility removal treatment: Livestock facilities (fences, artificial watering sites – especially troughs associated with pipelines and water haul sites, corrals, etc.) serve as zones of livestock concentration, and result in areas of severe disturbance readily colonized by highly flammable exotic species. Removal of these facilities and restoration of disturbed zones will limit spread of invasive flammable species, and help develop healthy understories necessary to carry cool, light fires in surrounding lands.

We are alarmed that BLM's Draft EIS casually casts aside Alternatives development based on a series of passive livestock treatments, and fails to adequately explain the ecological benefits of such treatments.

Road/ORV trail closure and rehab/restoration treatment: Closures and restoration treatments quell the spread of flammable invasive species from disturbed road and trail edges. Roads are known to serve as conduits for weed invasion (Gelbard and Belnap 2003). Then, domestic livestock spread weeds from road or trail margins crosscountry into wild land areas.

Road closure coupled with grazing reductions can have large-scale positive effects, as roads as weed conduits can be closed, and livestock reductions minimize spread of weeds already present within the area.

Allowing natural successional processes and healing processes to occur in plant communities that are still relatively intact is the most cost-effective method of attaining natural fire cycles, reducing buildup of hazardous fuels over time, etc. Natural mortality occurs in sagebrush, sagebrush-bitterbrush and other vegetation types. Allowing natural processes to play out, while removing or minimizing those agents that are disturbing natural ecological processes takes patience, but minimizes risks of exotic invasion that accompany aggressive intervention such as fire or mowing.

HAZARDOUS FUEL

If BLM plans on using this term in its analysis, we ask for a careful and scientific description of the basis for its use. For example, Idaho Falls BLM engaged consultants to prepare an EA for "hazardous fuels reduction" in Sands Checkerboard. We are uncertain just what the hazard is here. Who or what is threatened by the woody vegetation termed hazardous fuels? Is cheatgrass a "hazardous fuel"? We certainly think this term is far more apt for cheatgrass than it is for most other vegetation situation where BLM applies it. BLM must develop a methodology to prioritize any "treatments' of hazardous fuels. This is necessary to most effectively spend scarce taxpayer dollars, best protect habitations and areas that are truly "at risk". Instead of spending hundreds of thousands of dollars planning 6-10 million dollars or more of "treatments" in the Jim Sage Area, or drastic "treatment" of the entire Samaria Mountain Range, These projects are primarily aimed at killing woody vegetation to promote livestock grazing. BLM must use a sound methodology to determine needs for treatment – and focus should always be on the areas within approx. 1/8 mile of actual interfaces with human habitation.

RESTORATION

Restoration of native vegetation communities and ecological processes must be the goal of all treatments. Restoration means restoring and maintaining ecological integrity. Ecological integrity is the ability of an ecosystem to support and maintain a balanced, adaptive community of organisms having a species composition, diversity and functional organization comparable to that of natural habitats within the region.

Lands of primary focus for most active restoration should be: Lands that have been invaded by flammable exotics such as cheatgrass or medusahead; and Lands purposefully seeded to alien species such as crested wheatgrass following past agency vegetation manipulation, fire, livestock damage, etc. These should be prioritized for treatment on the basis of: Geographic location and continuity/connectivity of native habitats that restoration would provide for native species. For example, crested wheatgrass seedings in the Little Lost River Valley are located in an area of great importance to sage grouse. Restoring the native sage-steppe vegetation on these sites as habitat for sage grouse and pygmy rabbit should be top priority, as well as prevention of any further degradation to still-native communities.

BLM must focus significant treatment and restoration efforts and spending of federal fire funds on restoration of native species composition and function to crested wheatgrass that has been rampantly seeded as following ill-conceived sagebrush removal or as post-fire "rehab", and lands overrun by cheatgrass. The current abundance of federal fire funds should be used to follow-through on BLM **post-fire rehab actions that have failed** in the past (please evaluate all seedings and identify failures and causes of failure), or where crested wheatgrass and other exotics were planted as a first step in arid lands rehabilitation.

BLM should use this EIS/PER as an opportunity to complete post-fire rehabilitation that has failed or had poor results on likely tens of millions of acres across the arid West. As part of this EIS/PER process, BLM should identify all lands where post-fire rehab/"emergency" stabilization with crested wheatgrass, intermediate wheatgrass and other exotics was conducted, and prioritize treatment of these lands to return them to native vegetation and restore natural fire cycles.

Experimentation with new techniques should be limited to lands overrun by cheatgrass and crested wheatgrass seedings.

For lands still in reasonable health with reasonable ecological integrity, passive treatments should primarily be applied. Techniques which minimize soil and native vegetation disturbance should be the first steps taken. Try these first. See if they work.

As the result of past proliferation of purposeful seedings of exotic species by BLM in te wake of past treatements or wildfire/ESR, huge sterile monocultures of exotic species dominate millions of Idaho BLM lands. These seedings, a result of activities to produce forage, sometimes under post-fire ESR, have had disastrous consequences for native ecosystems. Plus, instead of restoring lands seeded immediately after fire to exotics, BLM instead has let these lands persist in a highly altered and unnatural condition. BLM now manages these seeded lands as permanent BLM sacrifice zones to the livestock industry – issuing TNR, converting TNR to permanent AUMs, etc. It is these post-fire seedings, a direct result of BLM's short-sighted livestock forage or ESR efforts of the past, that have been used as the basis for massive AUM increases to wealthy permittees, in the Jarbidge Field Office.

BLM must fully assess the impacts of these past actions in order to understand the context of your current decisionmaking process, as well as to assess environmental impacts and reasonably foreseeable outcomes.

As part of this EIS, BLM must consider restoration of native vegetation on all lands initially seeded to exotics in past or future ESR activities. This NEPA document should include a timetable for accomplishing this.

PREVENTION

Arid lands may become so degraded that they can never recover. These communities have been described (Archer and Smeins 1991) as crossing a "transition threshold" –with loss of topsoil, dominant species that have become locally extinct, and introduced species that have become so dense that weedy annuals become the climax species. All efforts must be made to keep plant communities from crossing this threshold, and thus requiring massive amounts of funds and elaborate treatments to attempt restoration.

Moderately degraded communities can become severely degraded if preventive action is not taken, or if new disturbance accelerates degradation or weed invasion.

Pristine and near-pristine lands should be protected using all possible techniques, especially passive restoration techniques such as immediate removal or reduction of livestock disturbance. Such lands typically serve as important habitats for native species and protection of biodiversity. Economically, it is a lot more cost-effective to keep lands from becoming degraded than it is to conduct wide-scale treatments after they have become degraded. It is critical that a BLM Weed EIS do so.

Prevention is especially important in upland communities, as they are less resilient to recovery following site disturbance than are riparian areas. Plus, the greater the aridity, the greater the difficulty of recovery. This may even vary within the same geographic area, as south and west faces are more likely to face cheatgrass invasion following treatments.

Almost universally, wetlands (springs, seeps, streams, playas, etc.) have been heavily damaged by livestock grazing and trampling activity. This has altered their morphology, areal extent of water tables/wetted soil areas, plant and animal species composition, plant and animal ecology. However, the current path of agencies shifting livestock use onto upland sites to take pressure off riparian areas is an ecologically destructive path, and prevention must be conducted in an integrated way. Both the riparian and upland areas are undergoing desertification processes, which ultimately make them less resilient, and less likely to be able to be restored to native systems.

ROLE OF DESERTIFICATION IN FUELS AND FIRE PROBLEMS AND ECOSYSTEMIC CHANGE

Please see our "Additional Comments" explaining the role of desertification caused by livestock grazing and other activities in causing fuel and weed problems.

WEEDS AND INVASIVE SPECIES

Exotic species are invading lands in the Interior Columbia Basin and across the arid West at an alarming rate. Exotic species alter western ecosystems by increasing fire frequency, disrupting nutrient cycling and hydrology, increasing erosion, altering soil microclimates, reducing biodiversity, and reducing wildlife habitat.

Disturbance related to livestock grazing, livestock grazing facilities, ORVs and extensive road networks are causes of weed invasion. Removing these sources of disturbance from "at risk" lands, and any lands that have been treated is a vital and integral part of any treatment, as well as prevention and restoration.

Livestock and ORVs are weed seed vectors. Livestock carry weed seeds in fur, feces, mud on hooves, etc. They also disturb soils and created ideal sites for weed seed establishment (Belsky and Gelbard 1999).

Recent observations show that exotics like cheatgrass and medusahead may be only the first in a wave of exotics and that new infestations of aggressive species such as white top

or knapweed occur in areas overtaken by cheatgrass and medusahead. Thus, BLM's current practice of using these weeded areas as "sacrifice zones" for excessive levels of livestock use, issuance of TNR, etc. only increases chances of invasion by new and even more aggressive exotic species, and continues to cause large-scale fires – Jarbidge BLM lands 2005 Clover Fire serves perfectly to illustrate this.

REMOVAL OF LIVESTOCK

Livestock grazing and trampling is the major cause of damage to upland plant communities and western ecosystems, and the major factor preventing recovery of these systems.

Removal of livestock, including through use of federal fire funds to permanently buy out grazing permits, must be a treatment that is evaluated under all alternatives. Lands should be prioritized for buyouts, based on the need for passive and active treatment measures to be applied.

It makes no sense to spend hundreds of dollars an acre on "restoration", or $40 an acre on a "prescribed" fire treatment if livestock grazing disturbance is then to again occur. Livestock are the primary cause of vegetation/fuels problems. Allowing the primary causal agent of weeds or fuels problems to then again be allowed to graze and trample these same lands, and cause a "need" for future treatments, makes no sense at all. BLM typically receives around 13 cents an acre annually for livestock grazing on these lands, so the economic folly of returning livestock to treated lands is extreme – just like the ecological folly.

REST FROM LIVESTOCK

BLM's EIS and the "updated" EFR plans are woefully deficient in providing adequate periods of rest from livestock grazing following treatments. In order to determine necessary rest periods, BLM must understand the condition of the community pre-treatment (see, for example, Eddleman et al 1994 describing poor or fair condition lands requiring signifcant periods of rest post-treatment). Specific time periods must be applied (5-10 year minimum), along with measurable recovery standards for soils, microbiotic crusts, herbaceous and woody vegetation recovery before livestock grazing can resume.

FIRE

BLM can not use "natural fire regimes", historical ranges of variability and other models as a basis for any fire planning. The potential for anything resembling a "natural "fire regime has been drastically altered by 150 years of livestock grazing and other disturbance so that natural fire regimes no longer exist in many areas. The imposition of the disturbance that would mimic a natural fie cycle is likely only to further degrade values of public lands – soil water, watershed, wildlife and important and T&E species habitats. As part of its assessment, BLM must first determine the current condition of all the vegetation communities in the affected lands. This information must be newly

collected as part of this process, since most BLM inventories, especially in these lands with ancient LUPs, are nearly 25 or more years old. This necessary is critical to understanding the risks of any treatment disturbance to these lands.

We believe that until effective answers are found for the vexing problems of invasive weeds such as exotic annual grasses, a cautious and prudent fire suppression plan must be in place across arid lands of the Project area. This is also necessary because of the unnatural and unstable condition of many sites caused by 150 years of livestock grazing.

FUELS REDUCTION

Shrub-Steppe Communities: Livestock grazing has fundamentally altered (and continues to alter and degrade) native understories, by killing and weakening native grasses and forbs and harming microbiotic crusts. As native bunchgrasses have been replaced by cheatgrass and other exotics in the wake of livestock grazing, plant communities are now subject to hot, early season fire instead of cooler, late-season fires. Cheatgrass provides dense, continuous fuel that causes fires to flash across the landscape. Cheatgrass results in frequent re-occurrence of fire, preventing regrowth of native vegetation. Plus, cheatgrass litter chokes soil surfaces, preventing germination of native shrubs (sagebrush, rabbitbrush). Fuels reduction in sage-steppe communities should focus on restoration of these cheatgrass-invaded sites and damaged understories. This is the primary active restoration measure/treatment that needs to be taken to fundamentally alter the nature of fire in these arid lands.

Low Elevation Forests: Here too, livestock grazing has fundamentally altered (and continues to alter and degrade) native plant understories. By creating abundant areas of bare soils, it creates ideal conditions for increased densities of young trees. These become the fire-prone doghair thickets of young trees that create ladder fuels and other incendiary conditions in arid forests.

Before Euro-American settlement, periodic fire cleared Ponderosa pine and Douglas fir understories, and the build-up of fuels was too slow to create hot canopy fires. With Euro-American settlement, and continuing to the present: 1) Selective logging of large trees occurred, and small, highly flammable trees were left; 2) Fire control was instituted; 3) Domestic livestock consumed grasses that carried low-intensity fires, and such fires became less frequent, and woody fuels built up.

Hot fires occurred in the past, and were a part of natural forested ecosystems. In many areas away from human habitation, fuel reduction may not be necessary.

To prevent buildup of woody, highly flammable fuels in arid forests at times need to be let burn under carefully controlled conditions. This should only occur in lands that are not at risk to exotic species invasion in the post-fire environment. Selective logging of old, fire-tolerant trees must be halted. Domestic cattle and sheep grazing must be decreased or ended.

JUNIPER, PINYON-JUNIPER

Juniper and other woody vegetation throughout the West have been vilified by the ranching industry. Pinyon-Juniper and juniper on many BLM-managed lands have been greatly fragmented by purposeful fire, escaped prescribed fire and wild fire. BLM has not demonstrated that it can fix the cheatgrass mess it has made in juniper habitats, as with prescribed-fire on lands such as Rice Canyon in the Burley District. Until BLM shows it can show restoration of the many already treated arid sites and return them to good or better ecological condition, BLM should not set out on a course of new disturbance.

Juniper removal should be highly selective, individual tree cutting of smaller-sized trees. Fire or extensive soil disturbance paves the way for weedy species invasion in juniper communities. Grazing causes juniper expansion by destroying and weakening native understories, and altering natural cool burning fires and fire cycles.

A CRITICAL AND METHODICAL EXAMINATION OF SUCCESS/FAILURE OF PAST BLM TREATMENT PROJECTS IS NECESSARY

A careful scientific evaluation and assessment of past BLM "treatments" must be prepared. How many acres have been burned in prescribed fires? What post-fire management was done by BLM? What were the results? What are their current vegetative communities? What past herbiciding has been done by BLM? Where? How many acres? What were the results? How many acres, and where, was post-fire rehab. done? What is the current condition and vegetation of these lands? Please provide maps that adequately depict the above information.

FIRE SUPPRESSION

Fire suppression is critical in areas of high ecological value habitats that are "at risk" to exotic species invasion following fire, areas where irreplaceable ecological values, human life, or cultural resources are at stake. Effective fire suppression plans must be in place for these lands. This is a critical component of minimizing rapid weed dominance.

BLM must provide information on the risks of prescribed fire escape, or raging out of control. This has happened repeatedly on Ely BLM lands, including near Cherry Creek in 2005.

Minimum impact suppression tactics should be followed.

PRESCRIBED FIRE

Prior to conducting any prescribed burn, BLM must establish a methodology to thoroughly consider and analyze, in an open NEPA process with full public comment and review periods, the following:

Long-term damage to microbiotic crusts, soil erosion through wind and runoff events, long-term loss of nutrients from already nutrient-deficient landscapes, loss of native species, radionuclide levels in surrounding vegetation, interrelation between prescribed burns and other "treatments" on neighboring federal/state/private lands, increased risks of exotic species invasions, impacts on habitat for native wildlife, indigenous uses of plants that may impacts, air quality impacts.

We are very concerned that BLM may initiate a program of widespread "prescribed" burns on lands that have been, and continue to be, seriously damaged by livestock grazing and other abuses, and which will are very vulnerable to exotic invasions in post-fire environments.

All fuels reduction projects must be based on comprehensive restoration assessments before any reduction takes place.

USE OF LIVESTOCK AS A "TOOL"

Livestock (cattle and sheep) should not be used as a "tool" or termed a "biological control". They are only a temporary, stop-gap measure and simply mowing weeds to ground level does not address the fundamental problem of eliminating weeds, and getting native species to grow. Native species will not recover if sites are grazed by livestock. In fact, the extreme disturbance caused by livestock will make sites MORE fire prone, harm remaining native species, increase likelihood of new or accelerated weed invasions, and increase disturbance to, or competition with, native wildlife.

In most instances, it would be just as effective to mow weeds as to use livestock, and would have far less impacts to soils. Plus, the possibility of introduction of new weedy species as a result of livestock disturbance would be minimized. BLM should examine the appalling fire history of the Jarbidge FO and assess how seeding of crested wheatgrass, harmful levels of livestock use, high stocking rates, etc. – have resulted in extensive and large acreage fires.

USE OF HERBICIDES

Herbicide use should be kept to an absolute minimum under all alternatives. Herbicides are known carcinogens. Many herbicides migrate in soils and infiltrate water supplies. Upper Snake River District's disastrous experience with the herbicide Oust demonstrates the dangers of herbicide use in wild land settings, and how despite reassurances in EAs, things can go very wrong. Here, Oust blew on soil particles into neighboring fields, and inhibited crop germination. We have seen wild settings where application of Oust has likewise had disastrous results – including in the "dead zone" it created in Rice Canyon in the Burley Field Office, and in the Jarbidge WSA Middle Butte fire area. For several years prior to the Oust drift onto ag. crops disaster, the corporation that manufactured Oust aggressively marketed its use at weed seminars attended by federal agencies. We are quite suspicious of the role of chemical corporations in pushing the use of herbicides, and are alarmed that this harmful chemical is now being proposed by BLM for use.

At the best, herbicide use is only a temporary measure or intermediate step to be used, and it does not address the basic causes of weed problems. A range of alternatives without use of sulfonylurea and acetolactate synthase-inhibiting herbicides should not be developed. This is essential due to the demonstrated ability of these chemicals to damage off-site plant species.

We often encounter areas on public lands – such as leafy sprurge spraying in the Lost River Area or white top spraying near Battle Mountain or on the Owyhee Front – where all native veg. has been killed by herbicides, and leafy spurge continues to thrive. The role of continued livestock grazing post-treatment in continuing weed invasion must be addressed – and the EIS does not do this.

MECHANICAL TREATMENTS

BLM should focus on use of mechanical methods of weed control that have been identified as effective in current scientific literature (mowing, spot fire (flamer), weed eaters, mulching).

Any mechanical removal of woody vegetation must be carefully conducted, and the current BLM mania to mow sagebrush sharply curtailed. Any removal of trees must be based on individual tree marking.

All off-road travel should be minimized during any mechanical treatment. The DEIS/PER fails to take necessary measures to do this.

All fuels reduction projects must be based on comprehensive restoration assessments before any reduction takes place. The DEIS/PER fails to provide any methodology to do so, and completely ignores restoration assessments.

MIGRATORY BIRDS/CRITICAL PERIODS/SAGE GROUSE

No treatments of any kind should be allowed during nesting periods for migratory birds, or in important or critical wildlife habitats during sensitive times of year such as winter in sage grouse wintering areas. The role of all past and proposed treatments on habitat fragmentation must be assessed. See Knick et al. 2003, Connelly et al. 2004 to understand the tremendous fragmentation that exists.

BIOMASS PROBLEMS

Use of material for biomass fuels should not be allowed. Biomass projects export nutrients from often nutrient-deficient sites, and reduce litter and ground cover, leading to greater site aridity. Biomass removal results in removal of woody debris and other important habitats for native wildfire, or plant materials that may be important for watershed stabilization, and that ultimately provides in-stream habitat structure for

aquatic species, including TES fish species. Biomass use is an extractive, commercial use of public lands with widespread harmful ecological impacts.

Nowhere does the EIS/PER address the acreage, location or expected impacts of biomass under the proposed actions.

PREVENTION

BLM's vegetation efforts can not be limited to disturbance-style treatments alone. Plant communities which are still healthy should be managed in a way to effectively: 1) prevent their conversion to weed-dominated communities; 2) prevent loss of biodiversity; 3) prevent changes in their fire frequencies and intensities; 4) prevent the conversion of shrub lands to woody thickets.

BLM's DEIS/PER ignores analysis of a range of prevention-based Alternatives.

EIS/PER ASSESSMENT

An independent assessment of the "need" for the proposed actions, and the risks of undertaking new disturbance must be conducted as part of this process. We would like to be involved with this effort, and would be happy to provide you with a list of names of scientists that could be involved in this. This should be conducted by qualified ecologists not tied to Western Land Grant universities.

A component of this should be an assessment of risks of new, additive or cumulative disturbances associated with the projects on top of existing disturbances. For example, if an area unrelentingly subjected to livestock grazing has previously been "thinned" by old herbiciding, or fire, what will the impact of a new treatment disturbance be on soils, vegetation, watersheds, water quality, native wildlife, etc.?

We urge you to focus on actual Interfaces with habitation, and not the large-scale wild land disturbance you propose.

ADDITIONAL SPECIAL STATUS, T&E SPECIES CONCERNS

The actions of the EIS will have large-scale effects, ranging from increased sedimentation of bull trout and redband trout streams to major fragmentation of sage grouse, Brewer's sparrow, pygmy rabbit, pinyon jay and other declining species habitats. The EIS fails to address this fragmentation, on top of the fragmentation that already exists – see, for example, the analysis of fragmentation on the Sage Grouse Conservation Assessment (Connelly et al. 2004). The EIS is lacking in basic information on soil stability, erosion hazard, wind and water erosion risks, etc. related to lands proposed for treatment.

This is critical for understanding likely sedimentation into streams, site soil stability post-treatment, likelihood of increased gullying, and other factors. Special status species

habitats are faced with a broad array of escalating synergistic and cumulative impacts to habitats and populations – ranging from development of new livestock infrastructure and expanded water-hauling to energy developments such as wind or geothermal and associated roading and disturbance across public and private lands of southern Idaho.

MONITORING AND MITIGATION

We are extremely concerned that monitoring and mitigation in the DEIS/PER are not adequate and do not even begin to address the large-scale disturbance of plant and animal community composition, function and structure that undertaking the large-scale treatments will affect.

Monitoring. The EIS fails to provide necessary monitoring, and decisive actions that will occur post-treatment if treatment protocols, livestock rest, etc. is violated. BLM should establish specific post-treatment criteria for monitoring for livestock trespass, sound studies of soil health, stability and recovery, etc.

Mitigation. Large blocks of land (> 10,000 acres) should be established within watersheds where no grazing or treatments are conducted, as reference areas for the outcomes/effectiveness/damage of the treatments that are proposed. Other mitigation includes termination of grazing disturbance on reference areas.

POST-TREATMENT ACTIONS

BLM current enforcement of grazing closure restrictions is incredibly lax – we have documented burn trespass after burn trespass where BLM has failed to administer more than a handslap - or simply ignored – permittee trespass of burns. For example – Rice Canyon – Burley BLM; Diamond A – Simplot livestock – Jarbidge BLM. Thus, we have no assurances that any livestock-related post-treatment measures will be followed, and these can not be used as "mitigation" for treatments.

MITIGATION AND MONITORING

BLM must develop adequate mitigation for activities carried out under this EIS. For example, if BLM wants to burn or thin 10,000 acres of sage grouse habitat, it should be removing livestock use from 10,000 acres of suitable habitat in order to provide better quality nesting and wintering habitat, not allowing livestock use to continue on neighboring lands.

BLM must develop a comprehensive monitoring plan with specific schedules, with all monitoring to be funded as part of the original "treatment" cost. Otherwise, timely and necessary monitoring will never occur.

USE OF NATIVE PLANTS AND LOCAL ECOTYPES

BLM must commit to mandatory use of native species, and local ecotypes not over-s9zed cultivars, in all post-treatment plantings. BLM cannot rely on the old excuse of seed being unavailable or too expensive for use. Use of all native seed with commitments to reseed repeatedly must be part of the planning and funding for all projects. Planned development of reliable supplies of native ecotype seed sources is essential.

WILDLANDS-URBAN INTERFACE

Any habitation interface projects must focus on projects at the actual interface with inhabited lands. This is an area of 1/8 mile or less. Any interface projects must be tied to private landowners taking strict efforts to control any fire danger on their own private lands. Intensive wildland-urban interface treatments include thinning, pruning, mowing, roof cleaning, replacement of flammable landscape and building materials). These actions should be limited to the interface, and the private property, and be use to create 1/8 mile of defensible space.

In reality, the interface is to be the area where most federal fire funds are being spent. Instead, BLM across-the-board is roaming far from any real interfaces in projects being conducted.

As part of this EIS, BLM should provide detailed maps of all interfaces, and a list and report of all criteria used to determine the existence of an interface.

COST: BENEFIT ANALYSIS

BLM must provide an adequate cost: benefit analysis of all actions. For example, what are the costs vs. the benefits of spending $100 an acre to treat/restore lands where livestock grazing will again soon resume?

What are the costs to recreational uses of public lands of large-scale treatments? We have been repeatedly contacted by hunters, hikers and birdwatchers who have had recreational outings – or favorite recreational sites - ruined by BLM "treatments". What impact do such losses have on the local and regional economy?

For example, in BLM's flawed Burley FO Jim Sage EA, BLM planned to spend 6 million dollars to kill junipers "hazardous fuels" across an entire mountain range, despite widespread weed problems throughout the lower and middle elevations, and BLM grazing proposals underway would have increased grazing on the "treated" lands. Thus, taxpayers would have been funding increased livestock forage under the guise of fuels projects, while receiving only tiny amounts of grazing fee dollars in return. This is just the type of thing that we fear will occur under EIS/PER.

BLM must adequately analyze a full range of alternatives based on sound economics. All alternatives should include use of federal fire funds to purchase grazing permits and permanently remove livestock from degraded lands, as this is a very foreseeable action during the life of this plan. We support an alternative that uses preventive measures and

passive restoration techniques, addresses causal agents of fire/fuels/vegetation problems such as livestock and ORV use, and which minimizes risks of invasive species spread stemming from any treatment that is applied.

WIND AND WATER EROSION

Actions under the Alternatives of the EIS/PER will bring about widespread soil erosion and relocation in wind and water. In order to understand the impacts of the actions, the current condition of all lands (soils, veg, microbiotic crusts, etc.) must be thoroughly assessed. The EIS fails to assess effects of multiple or overlapping treatments. For example, how will herbicide runoff be accelerated in burned landscapes? This also relates to air quality problems, and possible increased air or water pollution on top of other pollutants. Recently discovered mercury contamination of Idaho waters and lands from gold roasting in Nevada must be considered in this analysis, also as these substances will pollute waters on top of the chemical, sediment or other substances from treated lands.

RELATED ACTIONS

BLM and the Forest Service often embark on fire-related/treatment projects. The interrelationships of all ongoing or planned activities in this region, including across ownership boundaries, must be fully explored.

COMMITMENT TO OPEN NEPA PROCESS

The BLM must require as part of the EIS/PER ROD that all future projects that are tiered or related to this EIS undergo, further environmental review at the level of an EA or EIS with full and open public comment and participation in the process. At present, agencies (such as Ely or Elko BLM) are conducting CEs, or closed door EAs (Spruce Mountain) for Treatments of every ilk, and barring the door on effective public input, and necessary environmental effects analysis. BLM just proposed changes that would allow grazing permit renewal to be conducted under CEs – thus there is no certainty that any environmental problems related to grazing will be fixed, or their impacts adequately assessed, on the lands where EIS/PER treatment would occur.

POST-TREATMENT, EFR

Idaho BLM's recent ESR/EFR updated protocols were big disappointments and relied on limited, outdated, or no science and ignored many actions necessary to ensure site recovery. BLM should use this EIS process to set science-based post fire/treatment standards to be incorporated in all ESR agency plans.

Use of Native Species: BLM must commit to use native species in all restoration seedings in all instances. In the past, BLM has used exotic, soil depleting crested and Siberian wheatgrasses, and aggressive, invasive, weedy forage kochia and intermediate wheatgrass. Instead of focusing on larger exotic plants (primarily because they produce

livestock forage, no matter how limited its palatability), BLM must use natives, especially species like *Poa sandbergii*, bottlebrush squirreltail and Indian ricegrass in lower elevation sites. In the past, BLM has failed to rest lands for sufficient periods of time to allow successful establishment of seeded native species.

As part of this EIS, please provide a science-based (not livestock-forage-based, but ecological science-based) assessment of predicted establishment times for seedings or recovery of native vegetation under the various environmental settings, and include in this predictions of "success" with specific livestock rest periods much greater thanare now applied. Please also thoroughly describe and assess the ecological impacts of the exiting seedings – impacts on soils, waters, vegetation, weeds, native biota, recreational and cultural concerns.

BLM must closely study the lessons provided by the bluebunch wheatgrass seeding in an ungrazed area near Kuna Butte in the Four Rivers FO – and any examples the agency may have across the West. Due to no grazing occurring for a decade, seeded bluebunch wheatgrass was surviving and thriving at low elevations. In addition, please use existing exclosures as reference areas for comparison of effects of no grazing for several years following a fire, vs. BLM's typical woefully inadequate 2 growing season's rest. There are also exclosures in the Jarbidge FO that can serve as reference sites and comparative examples. One is located north of Winter Camp Butte, others are near Roseworth. Please visit these sites, and quantify the differences between vegetation inside and outside these exclosures, and use this information in developing a realistic time frame for livestock exclusion from seeded lands.

Sagebrush and other appropriate native shrubs (winterfat, shadscale, rabbitbrush) must be included in all post-treatment seedings, and repeated efforts must be made to establish native shrub cover, due to its importance to many native wildlife species.

BLM must use some of its burgeoning fire funding to set up a reliable network and system for supply and storage of native seed, including locally adapted ecotypes, so that this native seed is readily available in the wake of fire. BLM will then no longer have the time-worn excuse that "we couldn't get native seeds, so had to plant cwg". It is time to act responsibly, and apply federal fire funds to setting up a reliable system of seed supply.

BLM must also commit to re-seeding of natives in subsequent years, if initial seeding attempts are not successful due to drought or other factors. This must be factored into any

No Need to Seed Herbaceous Species in Many Higher Elevation Sites

Many higher elevation sites require NO seeding of herbaceous species post-fire. Only sagebrush or other native shrubs should be seeded in these lands. It is essential, however, that these sites receive adequate rest from livestock grazing so that understory components, including microbiotic crusts, can recover – this is essential to prevent new weed invasion. The two grazing season's rest is not sufficient.

BLM claims it may reseed or replant areas with "desirable" vegetation when the plant community cannot receive and occupy the site sufficiently. BLM provides no methodology or protocol used for making such determinations.

Livestock Trespass, Other Post-Fire Non-Compliance: As part of this NEPA process, BLM must review records of livestock trespass or non-compliance, and assess its frequency and impacts to treatment outcomes. What are the impacts of trespass on outcome of rehab efforts? BLM must also provide strict penalties for post-fire trespass by livestock on burned areas. As taxpayers often have spent hundreds of thousands of dollars on post-fire rehab and other ESR activities, accountability and effectiveness of rehab is essential. Please describe how trespass may harm any site recovery. For example, trespass has been a tremendous problem in Burley BLM lands, and documented by Miriam Austin of WWP and others over the years. The trespassed public lands at Rice Canyon and in the Goose Creek watershed of Burley BLM provide a perfect example of BLM Post-fire failures to control livestock.

Livestock Facilities: Post-treatment actions/EFR must sharply limit the use of federal fire funds in construction of post-fire livestock facilities. BLM's typical response to fire/treatment is to place a fence, often permanent, around the perimeter of the disturbed area, and often to develop additional water facilities outside the fenced/treated/burned area. These actions (fences that often become permanent, new water facilities) are NOT part of post-fire/post-treatment rehab, they are part of livestock management on surrounding lands. Such projects inflict, in an unplanned and unnecessary manner, a new array of disturbances to wildlife habitats already impacted by fire disturbance. Existing pasture fences should be used, and new fences should not be built.

There are many harmful impacts of barbed wire fences and other livestock facilities – posts serve as perches for predators, observation points for brown-headed cowbirds. Plus, fences cause avian mortality from collisions. New water sources lead to rapid disturbance and depletion of lands in the areas surrounding them, placing additional stress on native ecosystems and dependent species.

WWP strongly supports using existing unburned pasture or allotment boundary fences as the structures that restrict livestock from burned or treated lands. By closing these somewhat larger land areas to livestock grazing, BLM will also provide some better grass cover and habitat for species like sage grouse, that face habitat loss and fragmentation as lands burn. A 4-5 year closure of the pasture or allotment will result in ungrazed areas that help to provide grasses of sufficient height, or other necessary habitat components, for sage grouse and other native wildlife. Only temporary facilities should be allowed, if any are used at all – primarily electric fences. All post-fire rehab plans must specify removal dates for any livestock facilities that result from fire rehab activities. However, temporary electric fences have a long track record of failure – please review information in Burley and Challis BLM files concerning woeful trespass of burned areas or sensitive riparian areas that resulted from the use of temporary fences, rather than removing livestock to existing pasture or allotment boundary fences .

AUMs Should Not Be Shifted Elsewhere: BLM should not shift AUMs from treated lands to other areas. All AUMs from burned lands should be placed in temporary suspension until rehab, or restoration, success occurs.

Regrettably, in some recent post-fire documents, BLM has merely been shifting livestock use elsewhere, and thus impacts of livestock on watersheds, wildlife, habitat, etc. are magnified and amplified to the detriment of native species and the ecosystems upon which they depend. BLM has never assessed the impacts of these shifted AUMs.

Area of Rested Lands Must Provide Habitat for Native Wildlife: BLM must protect land areas sufficient to provide habitat for sustaining viable and healthy populations of native wildlife as part of all treatment or ESR activities and decisions. This is particularly important for declining shrub-steppe species that are facing accelerated habitat loss and fragmentation (Knick et al. 2003, Connelly et al. 2004). BLM must assess the status of populations and habitats within the larger landscape area, and determine the likely effect of a fire on special status species and other important biota. BLM must also act to take protective measures – not only on the fire-affected allotments, but also on surrounding lands, and to buffer habitat loss until the habitat that has been lost can be restored.

Watersheds/Water Quality: Resting sufficient areas – burned and unburned, treated and untreated - is essential for watershed protection.

Risk Assessments: BLM must conduct assessments of the risks of seeding failure/loss, increased depletion, weed invasions, under various post-treatment grazing strategies and across a broad range of alternatives. What are the risks of seeding weakening and depletion if grazing is allowed to resume too soon?

Minimal Use of Chemicals: BLM must strive to minimize use of chemicals in wild land settings. An increasing segment of the public has health problems related to chemical sensitivities. Chemicals may leach into water, blow on eroding soils into other sites. Wind erosion is far more significant in post-fire environments, as dark bare soil surfaces heat up, with the result of funnel-cloud erosion/dustdevils blowing soils away. Cancer, respiratory problems and many other human health effects of herbicides and other treatment chemicals are well-known.

If BLM chooses to use chemicals, the treated lands, and surrounding areas, must be posted with signs IN ADVANCE that warn the recreational public of chemical use and possible exposure. BLM's disastrous use of Oust demonstrates the uncertainty associated with use of chemicals in wild land settings, where wind erosion or water runoff may transport chemicals to unintended areas with unintended consequences.

Periods of Rest: BLM must require adequate periods of rest from all livestock grazing to ensure that full recovery, or establishment of seeded vegetation, occurs. This time period is much longer than BLM ever requires, and is often dependent on the condition and

health of vegetation communities pre-fire. Eddleman et al. (1994) described 4-5 year periods of rest as necessary for degraded western juniper communities.

Low elevation sagebrush-steppe communities may require a decade or more, and repeated seeding efforts during periods of favorable weather, to allow re-establishment of native vegetation. The EIS plan must address these necessary periods of rest, and not base its actions on the convenience of the livestock industry.

Commitment to Rehab. Time periods sufficient to achieve adequate and healthy native vegetation communities, must be mandatory. A reasonable time period would be 5-10 years, given the vagaries of weather and drought cycles in depleted arid low elevation lands.

What About Restoration? "Rehabbing" in the BLM sense, is vastly different from restoration to a full component of native vegetation and ecological processes. Under what circumstances will BLM undertake Restoration?

Analysis of Past EFR/Rehab/Restoration Actions. As part of this NEPA process, BLM must assess all its post-fire rehab herbicide use efforts and seedings in the past 30-40 years, or however long records have been kept. For example, which cwg seedings in the Jarbidge were planted, when? With what species? What is their current condition?

Following this, BLM must collect site-specific data on the current condition, health, wildlife, recreational and other values of these areas seeded post-fire. How many new fences, pipelines, troughs, etc. have been built using ESR funds, or federal fire funds? What impacts have they had? A complete analysis must be presented in this NEPA document.

Economics: A complete analysis of the costs and benefits of spray/treatments must be provide. What is the per-acre dollar cost of all actions under all alternatives? What are the ecological costs/benefits of these actions?

BLM must also assess impacts of poor pre-fire land conditions and management on the outcomes of any post-fire recovery, and of the likelihood of success of any post-fire rehab.

We believe you must provide extensive analysis of the impacts of post-fire "salvage" logging or thinning. Is that contemplated under this EIS/PER? If so, what are its impacts to soils, vegetation, weed invasion risks, wildlife habitats, fisheries, recreational and other uses of the affected lands? What have been the impacts to, and what is the condition of, lands where this has occurred in the past?

Sincerely,

Katie Fite
Western Watersheds Project