NGO-WWP-Fite

Comments

materials necessary for food and cover for special status species and other important components of the food chain– such as raptor species small bird, mammal and lizard prey. This results in further depletion of remaining native vegetation communities and tramples and destroys remnant microbiotic crusts (especially since that one AUM has to roam over large areas to find enough to eat. In these lower elevation lands under current management and in its proposed action, BLM appears to be managing FOR cheatgrass and halogeton, and doing all it can to foster continued harm. In this EIS effort, BLM must admit that portions of these lands (some with stocking rates of 20 or more acres per AUM) are NOT suitable for grazing, remove livestock and reduce AUMs. Once productivity drops below a certain level, lands should not be available for grazing use.

- Less fragmented and relatively intact lands are essential for maintenance and recovery of sage grouse, raptor prey, migratory bird, pygmy rabbit and other important or special status species populations, and where these values are being harmed by the grazing of large numbers of AUMs and/or threatened by new livestock facilities or vegetation treatments should be found unsuitable for grazing – giving the increasing importance of these competing values. The solution is not to juggle seasons of use - but to determine, when weighing relative values, if livestock grazing is not a compatible use of this land, or if should be withdrawn from grazing.

- The steep, at times forested, slopes of the Sky Island Pine Forest and Jackson Ranges are unsuitable for livestock grazing (slope, erosion, values of forest communities), and should be found unsuitable for grazing.
-
- Depleted seedings that have lost productivity should be identified for restoration to native vegetation, and removed from the "forage" base. If ranchers did not take care of seedings, the public deserves to have the lands restored and taken out of the forage base. Their depletion shows the unsustainability of grazing livestock on them.

NGO-WWP-6

Please review and provide actual use figures over the past decades, to see where even this "honor system" method reveals "paper cows and sheep" AUM numbers/stocking rates far above those actually grazed. By failing to adjust stocking rates to reflect the suitability, capability and productivity of lands for livestock use, BLM is artificially inflating and propping up the sale values of public land grazing permits, plus keeping the door open for the livestock industry to exert political pressure to graze livestock far in excess of sustainable levels, and casting aside other values of public lands.

N-WWP-7

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

BLM "Range"/Vegetation Data

N-WWP-8

At present, BLM has very little current information on ecological conditions and the health of native plant communities across the landscape. When BLM conducted its limited and narrow FRH assessments and allotment evaluations, it relied on data that was largely a decade old. It

5

Responses

NGO-WWP-6: This is addressed through regular compliance checks per allotment. SOPs have been amended to reflect compliance actions.

NGO-WWP-7: Comment noted.

NGO-WWP-8: FLPMA Sec. 202(c) (4) gives BLM the discretion to rely to the extent it is available, on inventory of the public lands, their resources and other values. Alternatives were developed using existing available data.

BLM is required under NEPA to provide information in NEPA documents that must be of high quality, possess accurate scientific analysis, and is subject to public scrutiny before decisions are made or actions are taken (40 CFR 1500.1.(b)). On the other hand, the purpose of NEPA is not to collect massive amounts of data but to provide data that is high quality and accurate in order to conduct a detailed analysis of issues that are truly significant to the action in question and reach an informed decision. The BLM has used available data, information based on professional evaluations and observations and applicable reference materials to support the NEPA analysis. The FEIS includes updated information, revised tables, and figures.

NGO-WWP-Fite

Comments

never re-visited the hand full of sites where ESI data had been collected. Key Area sites are located in only the most accessible areas, and are clustered in particular areas of the allotments, leaving vast land areas with no monitoring information at all collected. BLM also failed to collect necessary data on degradation caused by livestock facilities and management activities. Current, comprehensive data on condition of soils vegetation, and habitats must be systematically collected.

Plus, BLM can not ignore evidence that its limited old data does show - i. e, only a small fraction of larger size grasses present are present in most sites that should be dominated by these species. Thus, "production" is greatly less than that of good or better condition sites, and this is typical of nearly all sites. BLM must also tie water developments, water hauling or other livestock management practices to site depletion and alteration of species structure and composition.

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

BLM must also conduct comprehensive new FRH assessments, in representative sites grazed by livestock across all areas of the allotments.

Myriad Harmful Impacts of Livestock Projects

NGO-WWP-9

The focus of this RMP must be to remove projects to facilitate restoration of native plant communities. Projects that serve to control livestock use and distribution can be replaced with specific stubble height and trampling standards that serve as triggers for livestock removal. Active herding should substitute for fences and projects. Ranchers should be required to have at least 1 herder for every 100 cattle grazed on public lands.

and other development wild land areas in order to protect wild landscapes and functioning ecosystems, and aid in landscape-level restoration.

NGO-WWP-10

Livestock Grazing Causes A Broad Array of Harmful and Ecologically Calamitous Impacts Often Downplayed by Agencies

There has long been a tendency by agencies to mask or ignore the severity of the impacts of livestock grazing to native wildlife habitats. The internal alteration, simplification, fragmentation and destruction of big sagebrush by livestock has been given lesser prominence and concern than vegetation conversion. Nearly all BLM lands suffer significant livestock grazing impacts/mechancial treatment on an annual basis (Braun 1998), and face chronic and cumulative damage.

When grazing has been discussed – it is typically referred to as "overgrazing", or "intensive" grazing without an acknowledgment that what is being termed "over" grazing are the standard stocking and grazing practices on public lands.

Responses

NGO-WWP-9: Removal of fences is addressed at D-WH&B 1.1 and D-LG 5.1.

NGO-WWP-10: Consequences from grazing and range projects are analyzed in Chapter 4. New projects are implementation level decisions, not an RMP level decision. During the implementation level planning process a separate public involvement and NEPA analysis will be conducted.

NGO-WWP-Fite

Comments

NGO-WWP-11

The drastic alteration of sagebrush structure caused by livestock is readily visible when even the most gross visual comparisons are made between untrespassed exclosures or ungrazed road right-of-ways, and grazed sites. Stark visual contrasts exist between battered, broken, and structurally altered big sagebrush growing in grazed areas and the full and deep canopied, structurally diverse unbattered shrubs in long-time ungrazed sites. BLM must move away from blind acceptance of myths put forth by commodity-driven range scientists often tied to western land grant universities. BLM must use best available science, not driven by commodity-production minded researchers.

Public lands grazing is increasingly dominated by huge corporate entities (see *San Jose Mercury News* 1999), and political pressures on range and agency scientists to ignore harmful impacts of livestock grazing can only be expected to increase.

NGO-WWP-12

Adverse effects of livestock management activities include sagebrush control efforts, effects on predator distribution and density through the use of artificial watering or supplemental nutrition and feeding sources for livestock, structural damage to dense stands of sagebrush, removal of current herbaceous growth or residual cover of native grasses and forbs by livestock for forage, and increases in the density or distribution of various invasive weed. Besides scientific journal articles (Mack and Thompson 1982, Fleischner 1994 and others), we urge BLM to review the wealth of scientific and factual information and photographs presented in both *Waste of the West* (Jacobs 1991) and *Welfare Ranching: The Subsidized Destruction of the American West* (Wuerthner and Matteson, eds. 2002) and also Debra Donahue's (1999) *The Western Range Revisited* in fully evaluating the colossal threats posed by livestock grazing to pygmy rabbits across the Intermountain and Great Basin region.

Livestock Grazing Causes Behavioral Disturbance of Wildlife, Removes Protective Cover

Livestock movement may disturb foraging or resting wildlife, increasing their vulnerability to predation, or increasing stress during winter, harsh weather or other critical periods. This may cause mortality.

Grazing removes cover important for visual screening and avoidance of special status species like the pygmy rabbit, and protection from attack by aerial and ground predators. Taller grasses also provides possible scent screening from ground predators.

Livestock Trampling Compacts Soils and Alters Soil Structure at Burrow Sites

BLM succinctly described impacts of livestock grazing on soils in the "Permit Renewal EA for WBW allotment" in the upper Little Lost (Idaho Falls BLM WBW allotment 2003). "Continued cattle traffic on livestock trails and watering areas[s] will increase soil compaction. Soil compaction by heavy objects, including trampling by cattle, penetrates and compact [s] soil material to depths of 15 to 20 inches. The surface 4 to 6 inches is usually released from compaction by frost action. The deeper soil compaction that is not affected by frost action may remain in the soil for years. Deep soil compaction restricts root growth, reduces soil productivity and contributes to water and soil erosion. Deep soil compaction can increase over time".

Responses

NGO-WWP-11: The purpose of the RMP ties into BLMs mandate and requirements under FLPMA. The need is because regulatory and resource conditions have changed as well as public demands and uses. The alternatives are developed from the purpose and need, issue identification, public scoping and comments received.

NGO-WWP-12: Consequences from grazing and range projects are analyzed in Chapter 4. New projects are implementation level decisions, not an RMP level decision. During the implementation level planning process a separate public involvement and NEPA analysis will be conducted.

NGO-WWP-Fite

Comments

BLM must assess impacts of livestock on soils throughout RMP lands, as part of this process.

NGO-WWP-13

Livestock Trampling Collapses Burrows and May Injure or Kill Pygmy Rabbits

There is resounding evidence of the harmful impacts of livestock trampling on pygmy rabbit burrows, and the burrows of other small mammals. FWS in 68 FR 43 states that cattle can directly damage pygmy rabbit burrow systems through trampling. Austin (2002) documented cattle trampling of active burrows in the Shoshone Field Office. Burrows were subsequently abandoned. FWS has recognized that trampling is a form of direct take, causing injury or mortality (68 FR 43).

NGO-WWP-14

Cattle can also trample and destroy migratory birds. The RMP must assess alternatives that minimize harm to ground-dwelling mammals, as well as prohibit all livestock grazing during nesting periods for migratory birds.

Livestock Grazing and Trampling Causes Widespread Erosion of Soils and Loss of Microbiotic Crusts Leading to Weed Invasion

Soils in many areas have suffered large-scale erosion, and are continuing to erode away in grazed, trampled, burned or mining or road-disturbed sites.

NGO-WWP-15

Trampling by domestic livestock harms or destroys microbiotic crusts in arid climates (Fleischner 1994). Microbiotic crusts are indicators of ecological health – they fix carbon and nitrogen, absorb incoming energy, stabilize soils inhibiting germination of non-native seeds, produce a rough microtopography that helps slow runoff, and unambiguously act to reduce wind erosion of soil surfaces. Biological crust loss occurs under heavy grazing on sandy soil sites. Loss of microbiotic crusts increases soil erosion in both coarse and fine-textured soils.

NGO-WWP-16

BLM routinely accepts large amounts of soil erosion as the norm. BLM must not routinely authorize domestic livestock grazing on lands with heavy to severe erosion hazards, or vulnerable soils. In this RMP Planning effort, BLM must act to restore damaged soils on arid lands, and prevent newdisturbance-related erosion from occurring. Preventing soil damage and erosion must be a key restoration goal.

Livestock Grazing Destroys Composition of Big Sagebrush Communities

Daubenmire (1970) described the lower resilience of sagebrush plant communities to grazing. Mack and Thompson (1982), in a classic paper "Evolution in steppe with few large, hooved mammals". This seminal paper discusses the myriad harmful impacts of livestock grazing to Intermountain and Great Basin sagebrush communities that evolved in the absence of large herds of hooved mammals like domestic livestock. Fleischner (1994) and Belsky et al. (2000) review the many harmful impacts of livestock grazing to arid western lands, including alteration of plant community composition and structure. Extensive literature documents the impacts of domestic livestock grazing in alteration of understory composition.

Responses

NGO-WWP-13: Objectives and management actions addressing trampling and micro biotic crusts are provided in D-5.1.

Regarding microbiotic crusts, the BLM has developed a range of alternatives under S 1.1 that address biological crust.

Consequences from grazing and range projects are analyzed in Chapter 4. New projects are implementation level decisions, not an RMP level decision. During the implementation level planning process a separate public involvement and NEPA analysis will be conducted.

NGO-WWP-14: This action is an implementation level decision, not an RMP level decision. Objectives and actions have been developed to address impacts to soils.

NGO-WWP-15: Objectives and management actions for migratory birds are addressed at FW4.

NGO-WWP-16: The RMP analyzed a range of alternatives to address impact to soils.

NGO-WWP-Fite

Comments

Anderson and Holte (1981) describe the significant increases in perennial grass and shrub cover that occurred after 25 years without grazing on sagebrush lands in southeastern Idaho. Cover of perennial grass increased exponentially, and shrub cover was 154% greater. Shrub cover increase was a result of increased canopy cover of sagebrush plants, and not shrub density increases.

Livestock Grazing Radically Alters Shrub Structure

Land that is intensively grazed by domestic herbivores often has relatively low structural complexity. In areas of deeper soils, cattle often differentially congregate on deeper soil sites for shade, wind protection, etc. and damage shrubs. Grazing can break down sagebrush cover and thus make it unusable.

Grazing disrupts sagebrush communities by breaking down individual plants and opening interstitial spaces. Grazing breaks down shrub cover, leading to loss of native grasses and forbs and invasions of exotic annual species like cheatgrass.

Negative impacts of grazing to sagebrush-dependent wildlife include physical destruction of dense, structurally diverse patches of sagebrush and the corridors that connect them, resulting in simplified and fragmented sagebrush habitats. Fragmentation of habitats can influence size, stability and success of wildlife populations.

Petitioners note that even a small number of cattle, which gravitate toward deeper soil sites or shade provided by shrubs, can strongly impact shrub structure. This is an impact that is never measured, quantified or controlled by land management agencies. This adverse modification of habitat can significantly alter or impair normal behavior patterns, as any agent that lessens shrub cover and structure harms the habitat components required by many native wildlife species.

Livestock Fences Degrade and Fragment Upland Habitats and Aid Predators

NGO-WWP-17

Between 1962 and1997, more than 51,000 km of fence were constructed on land administered by BLM in states supporting sage grouse populations (T. Rich pers. comm. cited in Connelly et al. 2000). The pace of new fence construction shows no sign of letting up, and in fact appears to be increasing as land managers seek to perpetuate high stocking rates on degraded lands. Construction of fences often involves cutting or clearing sagebrush along new fence lines, thus reducing areas of big sagebrush cover. Fence lines are often routinely driven, including during construction, with new roading the end result. Roads spring up along fencelines, as the land is driven during the process of fence construction as well as for future maintenance, and visible scars attract continued motorized use by the public. Livestock trailing back and forth along fences commonly occurs, further crushing and battering sagebrush, as well as compacting and trampling soils and degrading understories.

Fences with maintained trails adjacent to them provide travel corridors for predators of sage grouse (Braun 1998. Many BLM 1:100,000 land status maps show this effect – most of the spiderwebbing of roads and roading are associated with livestock fences, pipelines and other

Responses

NGO-WWP-17: Impacts from livestock grazing are analyzed in Chapter 4. Adaptive Management principles that include alternative management actions for livestock besides fencing are provided in LG 1.2. Fences are addressed at D-WH&B 1.1 and D-LG 5.1.

NGO-WWP-Fite

Comments

facilities. While fences are frequently described as being constructed to "improve livestock distribution", the end result, is more intensive livestock utilization and degradation of previously less used areas.

Fences provide perch sites for raptors, rvens and brown-headed cowbirds. (Call and Maser 1986, cited in Connelly et al. 2000). Raptor predation has been the cause of known or suspected pygmy rabbit mortality in many pygmy rabbit field studies, and of sage grouse mortality. Vast lower elevation wild lands (sage brush and salt desert shrub) are a landscape that is devoid of many natural elevated perch sites that can be used by raptors to scan for prey, so fences introduce an unnatural and harmful vertical structure that provides an advantage to predators.

NGO-WWP-18

Fences distribute livestock over areas that were sporadically or lightly used in the past (Nevada BLM Sage Grouse/Sagebrush Ecosystem Plan 2000), to the detriment of native species. Range "improvement" risks to all known sage grouse habitats identified by Nevada BLM that and that are directly relevant to pygmy rabbits include: Construction of water developments that result in increased livestock utilization in known sage grouse habitats; construction of fences that provide perch sites for avian predators, construction of livestock facilities (livestock troughs, fences, corrals, handling facilities) that result in livestock concentrations in sagebrush habitats. Nevada BLM livestock grazing decisions continue to blithely ignore the agency's own guidelines for sage grouse. This is another example of a plan, that looks great on paper, but is seldom, if ever, implemented. BLM must act in this RMP to implement actions necessary to protect native species from the harmful effects of livestock facilities. Control of livestock under this planning effort must be focused on measurable standards of use, and active herding, and not structural facilities that fragment habitats and degrade wild land settings.

Livestock Water Developments Degrade and Destroy Habitats

NGO-WWP-19:

Water developments typically dig into the heart of springs, and water is removed from the spring to a pipeline system that then supplies a series of troughs in upland sites. These developments extend use into less used areas, and have serious harmful impacts to soils, vegetation and wildlife. This de-watering of springs can also reduce the zones of soil moisture surrounding springs that often are capable of supporting the tallest Basin big sagebrush.

Once a spring is dug into, and water put into a pipe, the pipeline provides new water sources, and resultant intensive concentration of livestock use in lands surrounding each trough site. The impacts of this extreme use extend outwards in a bulls eye pattern. The immediate area around the trough becomes a dead zone – dirt, manure, stubs of sagebrush, heavily compacted soils - and an ideal site for weed infestation and spread. The area becomes a sacrifice zone to livestock. Locations chosen for troughs and pipelines are often remnant patches of better condition native vegetation, which may be essential refugia for native species. Livestock utilization levels are averaged over large areas, and impacts of new developments are largely unaddressed and unmitigated. There is a lag time between when pipeline and trough installation occurs, and the full extent of resulting damage to more distant native vegetation communities occur. Rapid habitat loss occurs in zones close to the trough. Vegetation depletion spreads outward each year, and is followed by continued and cumulative degradation and loss of native understory

Responses

NGO-WWP-18 This action is an implementation level decision, not an RMP level decision. During the implementation level planning process a separate public involvement and NEPA analysis will be conducted.

NGO-WWP-19: Addressed in Actions LG 5.3 and 5.3.1. A specific project development is an implementation level decision, not an RMP level decision. During the implementation level planning process a separate public involvement and NEPA analysis will be conducted.

NGO-WWP-Fite

Comments

vegetation and altered shrub structure for 1 to 2 miles surrounding upland water sources. Plus, spring projects de-water wetted areas of deeper soils surrounding springs, and the size of the area capable of supporting tall sagebrush and other vegetation may shrink over time.

Pipeline construction also causes large bare areas of disturbed soils, and pipeline routes often are driven, and end up becoming new roads. Roads serve as travel corridors for predators in sagebrush habitats (Braun 1998) and hunters, as well as conduits for OHV users to access new terrain.

This plague of pipelines and other livestock developments has been accelerating in recent years, driven by constant failure of livestock permittees to meet grazing objectives and agency unwillingness to cut overall livestock use and numbers.

Water Hauling for Livestock Demolishes Habitats

BLM frequently allows water hauling as a way to provide livestock access to water in lands with some forage remaining. Water hauling is a method to extend livestock use in allotments where forage near traditional water has been severely depleted, and has the same effect as pipeline trough placement. Water hauling is typically little controlled, and one-time livestock watering events can cause long-term and/or irreversible harm to native vegetation sites. Nevada BLM offices in the range of pygmy rabbit routinely allow and extol the benefits of unsupervised water hauling in new sites to extend livestock use from severely depleted sites into less used areas.

NGO-WWP-20

In addition, water hauling activities associated with sheep and cattle grazing can obliterate habitats in a couple of hours or less. Many sheep operators in arid lands have water trucks that haul water to troughs that are regularly moved over the course of a day along with the sheep. Soils and sagebrush surrounding temporary water trough locations can be irreversibly damaged by large concentrations of sheep. This RMP must stop this use of water-hauling, as it leads to destroying, rather than restoring native plant communities.

One-time water hauling events can cause permanent harm to sites where tanks are located and large areas of surrounding lands, as they result in intense concentrations of livestock. The surrounding area essentially becomes "cow-bombed", with native vegetation and microbiotic crusts destroyed, and primed for weed invasion.

Lands that are too arid to have available surface water should not be grazed. The more arid the lands, the greater the difficulties - or impossibility – of site restoration following disturbance events.

We have been shocked by BLM grazing decisions we have received in the past that actually promote/require the use of new water haul sites for livestock, with minimal or no discussion of the serious harmful impacts that result. If BLM plans to continue water hauling, it will not be fulfilling its goal of restoration. Any sites must identified and catalogued in the RMP.

Livestock Wells and Pipelines Destroy Habitats

Responses

NGO-WWP-20: Water hauling is an implementation level decision outside the scope of this EIS.

NGO-WWP-Fite

Comments

To sustain high numbers of livestock, BLM typically relies on a plethora of new water developments that extend livestock use into remnant less grazed lands. The current BLM strategy Westwide is to shift livestock impacts from beleaguered riparian areas, and extend livestock use into previously less-used native shrub-steppe habitat.

New intrusions in remnant less grazed uplands will have especially harmful impacts to populations of sage-steppe and pinyon-juniper species, as these may be the habitats where reproductive success is greatest, predation is less, etc.

NGO-WWP-21

Such agency actions are rapidly destroying remnant less grazed big sagebrush habitats in northern Nevada. This RMP effort must focus on removing wells and pipelines, and restoring disturbed lands.

Riparian Fencing Shifts Intensive Livestock Use to Unresilient Uplands

Typical riparian fencing projects slice across big sagebrush, pinyon-juniper or other areas near stream bottoms, and do not include the entire floodplain area. Livestock continue to concentrate on flatter areas, differentially crowd near fences, etc. So while some portion of a riparian area or spring complex may be protected by fencing, significant new "dead zones" - where livestock strip understories and batter and often kill shrubs - and large bare soil areas vulnerable to weed infestation, result. Water gaps, sometimes several hundreds of yards or more, may be constructed to allow livestock access to streams, and floodplain, banks and sidehills become a barren wasteland. Livestock use here is often so intense that agencies dump rocks on banks and sidehills to "harden" the water gap. Zones of impact of shrub structural damage, soil compaction, etc. of water gaps extend for large areas, as livestock converge on single point water access.

Fences concentrate use into new areas. In the course of 2 or 3 years alone, petitioners have observed big sagebrush habitats that has been essentially stripped of understory, the sagebrush battered, bashed, and weakened, and canopy cover reduced – due to construction of riparian projects designed to continued high levels of livestock grazing.

Placement of Livestock Salt and Mineral Supplements in Upland Sites Destroys Habitats

NGO-WWP-22:

Due to current agency focus on shifting livestock use away from riparian areas, many agency grazing permits require the placement of salt and mineral supplements ¼ mile or more distant from water – which means in anywhere a rancher wants in sagebrush uplands. Agencies exercise no oversight over where these livestock lures are placed, as management paradigms view sagebrush as "disposable". A one-time placement of salt or minerals can cause long-term alteration of dense patches of big sagebrush, severe soil compaction, lead to irreversible weed invasions, etc. Nevada BLM (2000) Sage grouse/sagebrush plan recognizes this as a threat.

Holistic Grazing and Herding Destroy Big Sagebrush Habitats

12

Responses

NGO-WWP-21: Impacts from livestock grazing are analyzed in Chapter 4. Salt and mineral supplements are addressed in individual terms and conditions to grazing permits. BLM adheres to 43 CFR 4130.3-2 and as identified in the Standards and Guidelines for Nevada's Sierra Front-Northwestern Great Basin Area.

NGO-WWP-22: The RMP analyzed various alternatives to restore degraded lands.

NGO-WWP-Fite

Comments

Holistic grazing is often invoked by agencies and livestock interests to resist or delay making reductions in livestock numbers in degraded lands. The practices of holistic grazing are particularly harmful to wildlife habitats. Large herds of livestock uniformly inundate sites, uniform and heavy utilization occurs, and soils are uniformly trampled and disturbed. Plus, a basic "tool" of holistic grazing is placement of salt or supplements in patches of thick shrubs to lure livestock to break down and alter the shrub structure – practices that are anathema to the pygmy rabbit.

Austin (2002) documented destruction and abandonment of occupied pygmy rabbit burrows and sagebrush by a livestock herding event in Shoshone Field Office lands.

Rest Rotation Grazing Schemes Flood Wildlife Habitats with Cattle

Without significant cuts in livestock numbers, a rest rotation grazing system typically means livestock numbers are increased in lands in "rotation" years when they are grazed and not being rested. This means additional livestock use on depleted lands. Effects of increased livestock numbers during spring periods or drought years increases competition for grasses, and may place even more stress on pygmy rabbit populations, and lead to declines or extirpation.

Drought Exacerbates Livestock Grazing Impacts and Competition

NGO-WWP-23

Agencies allow heavy levels of livestock use even in drought years. Despite 2002 being the third or fourth consecutive drought year throughout the pygmy rabbit's range, status quo livestock grazing continued on BLM and Forest lands in nearly all areas. In 2002, all of Nevada and most big sagebrush counties in Idaho were declared drought disaster areas. The consequence of unrelenting livestock grazing is vividly shown in the drought and livestock destroyed lands. Weakened, stressed plants, depleted understories, pulverized soils with damaged microbiotic crusts with increased vulnerability to exotic species invasion, etc. all result.

BLM Nevada Sage Grouse/Sagebrush Guidelines (2000) conservatively states the need to reduce stocking rates or change management practices with two years of drought, and identifies the failure to adjust grazing during drought periods as a when competition for scarce resources intensifies as a risk factor for sage grouse and sagebrush ecosystems.

Protection of Native Vegetation

NGO-WWP-24

BLM must use current ecological science to develop a range of alternatives that act to protect remaining native vegetation communities from activities that result in disturbance that could lead to weed invasion/proliferation of exotic species that threaten sagebrush salt desert shrub, pinyon-juniper and other vulnerable vegetation communities, and their ultimate further fragmentation. Protection of these communities is the first step to ensuring that their ultimate restoration may be possible. BLM must conduct a current inventory of native plant community condition and restoration needs.

NGO-WWP-25

BLM must include a description and analysis of all the significant sagebrush, pinyon-juniper, forest, playa, spring, linked aquifer, watershed, and special status species habitat values of the

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Responses

NGO-WWP-23: The BLM has conducted additional analysis for climate change in the FEIS. This analysis includes greenhouse gases, major economic sectors contributing to emissions that are subject to BLM land use management practices, global mean temperature changes and future trends.

NGO-WWP-24: A range of alternatives that addresses vegetation communities is provided under Vegetation-Rangeland section. The vegetation goal is; "Protect, maintain, and improve healthy vegetative communities with various age classes of shrubs with a vigorous, diverse, self sustaining understory of grasses and forbs relative to the site potential, while providing for multiple uses."

NGO-WWP-25: See response to NGO-WWP 8.

NGO-WWP-Fite

Comments

EIS allotments and surrounding lands. This includes a discussion of the regional and national significance of less-fragmented sagebrush landscapes, wild raptor habitats, sage grouse habitats, etc. For example, BLM should describe the setting, and discuss in detail the unique and significant biological features of the lands, as its first and foremost consideration. The EIS should be seen as an opportunity to evaluate the ecological and conservation significance of these lands from the standpoint of special status species and scarce desert waters. BLM must consider livestock grazing as one of many uses of these public lands, and analyze it accordingly. This analysis must encompass native vegetation, soils, microbiotic crusts, native wildlife specie occurrence and habitats, special status species occurrence and habitats, roadless lands, livestock facilities, fragmentation, weeds, desertification, etc.

NGO-WWP-26

We believe it is necessary for BLM to establish several large ACECs to protect the significant special status species, conservation, watershed and wild land values. Of a size that will protect landscapes or ecosystem level processes. In addition, BLM should designate RNAs, embedded within a larger matrix of an ACEC of sufficient size to protect important ecological values.

Large ACECs and seasonal avoidance criteria should be part of the EIS process - for example, all identified sage grouse habitat should be withdrawn from ALL new development of livestock water, due to the extensive habitat fragmentation that could occur if new pipelines are built, and subsequent increased chronic depletion were to occur.

NGO-WWP-27

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

NGO-WWP-28

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

Roadless Lands/Wilderness

NGO-WWP-29

BLM must use this planning process to expand its understanding of unroaded lands beyond that of the out-dated, deeply flawed and politically biased wilderness inventory process of over 20 years ago. The importance of large parcels of interconnected unroaded wild lands in these allotments becomes greater with each passing day – as more information about roads causing disturbance to species during sensitive times of the year, roads serving as conduits for weed invasion (Gelbard and Belnap 2003), with weeds then being spread into wild lands by livestock, and road impacts to watersheds, is gathered. FLPMA requires BLM to undertake a continuing inventory of the public lands and to use this inventory to develop land or resource management plans.

Review of BLM's own records on the 1979-1980's wilderness inventory process show that BLM engaged in flawed, biased and irrational analysis. It focused primarily on canyons or very rugged mountainous terrain, and rejected plateau, basin and alluvial fan lands where the livestock industry hoped to increase livestock use through construction of new livestock installations or

Responses

NGO-WWP-26: BLM has developed a range of alternatives. Refer to ACEC 1.

NGO-WWP-27: A range of alternatives addressing ACECs are found in section ACEC 1. Alternative D recommends maintaining the existing ACEC and recommends the addition of 3 new ACECs. In addition various Alternatives in the RMP designate large areas as avoidance and exclusion areas. Avoidance Areas would limit discretionary realty actions while exclusion areas would prohibit discretionary realty actions.

NGO-WWP-28: Comment noted.

NGO-WWP-29: Included in the RMP are lands identified having wilderness characteristics. These lands have met the criteria identified in the draft Wildlands Policy.

Included in the RMP are lands identified having wilderness characteristics. FLPMA Sec. 202(c) (4) gives BLM the discretion to rely to the extent it is available, on inventory of the public lands, their resources and other values. Alternatives were developed using existing available data.

OHV and route use will be addressed in the Comprehensive Travel and Transportation Management Plan. SOPs are provided in the Draft RMP regarding road maintenance and weed control. Refer to Appendix B.

NGO-WWP-Fite

Comments

"treatments". Besides being fraught with political bias, the lens through which BLM evaluated roadless values in those bygone days is outdated, and unsupported by current scientific knowledge of the accelerating fragmentation of sagebrush habitats, and the sensitivity of sage grouse and many other species to disturbance or habitat degradation resulting from roading, the need for large intact landscapes to protect native species and biodiversity, and the growing ublic appreciation of wide open spaces.

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

NGO-WWP-30

In addition, BLM can use this EIS effort to newly evaluate and add to an understanding of: Naturalness, solitude, primitive and unconfined recreation, special features in existing WSAs.. Plus, BLM must update the "Special features" that in 2004 certainly includes presence of sage grouse or pygmy rabbit habitat, presence of native vegetation communities with minimal exotic species infestation, importance of large unfragmented "sagebrush sea" expanses, etc. Impacts of livestock grazing on WSAs or other Roadless land values must be thoroughly evaluated under all alternatives.

The Sagebrush Sea

Sagebrush plant communities Westwide are besieged by an array of threats. These threats include exotic species, altered fire cycles, continued disdain in the eyes of the livestock industry, continued destruction by livestock grazing: livestock alteration of the native herbaceous understory with resultant cheatgrass invasion; livestock breaking or consuming sagebrush or other shrubs and destroying the physical structure with resultant destruction of the necessary shrub structure for nests of species such as loggerhead shrikes or overhead protection for the pygmy rabbit; plans to hack, beat, thrash, burn and otherwise remove sagebrush to conduct "seedings" or to thin or remove sagebrush in sites susceptible to cheatgrass or weed invasion, especially under harmful grazing practices (stocking levels, levels of use, no real rest) under the Decisions. Note: Many past BLM seedings, green strips, and sagebrush thinning projects have been ecological disasters – leading to loss of topsoil, cheatgrass and other weed invasion, and loss of habitat for native species.

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

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Responses

NGO-WWP-30: BLM is required to manage Wilderness Study areas according to Section 603 of FLPMA. "The BLM Interim Management Policy Under Wilderness Review" (Manuel H-8550-1), guides the management of WSAs. Wilderness Study Areas are addressed in WSA 1 and WSA 2.

NGO-WWP-Fite

Comments

Responses

weed invasion, and shifts in shrub species and loss of shrub structure through consumption and physical damage.

Sage Grouse

NGO-WWP-31

Recent sage grouse research has revealed that vast acreages (across hundreds of square miles) may used by sage grouse in the course of a year. BLM must fully consider the vast acreages needed by sage grouse for leks, nesting, brood rearing, and winter habitats. ACECs of sufficient size to include all the lands required by populations must be designated accordingly. We also ask that you work with the appropriate agencies in Oregon and California to understand the habitat needs of wildlife populations shared between states. This analysis must also transcend allotment boundaries – as wildlife nesting in one allotment may have critical wintering habitats, prey bases, etc. in other allotments.

N-WWP-31: BLM has not received any ACEC nominations for many of these areas. Refer to Appendix F, as the ACEC process has been completed with public nominations. The Pine Forest ACEC includes large acreages and addresses wildlife needs.

Restoration

NGO-WWP-32

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

N-WWP-32: Comment noted.

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

Specific areas to be restored to native vegetation composition and structure: Crested wheatgrass seedings, halogeton-infested salt desert shrub communities, cheatgrass communities.
In addition: degraded lower elevation salt desert shrub/Wyoming big sagebrush communities with cheatgrass understories, downcutting or shrinking wet meadow complexes and springs and seeps throughout the EIS area, "developed" and de-watered springsor white top/hoary cress infested areas.

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

NGO-WWP-33

Fire, at present, is not an appropriate restoration technique in many parts of the planing area due to the risk associated with the threat of exotic species invasion following fire disturbance. The looming threat of exotic species invasions following site disturbance such as fire on livestock-degraded lands makes playing with prescribed fire a dangerous undertaking that may have irreversible consequences. Fire is simply an additional (and often drastic) site disturbance on top of the ongoing chronic disturbance of livestock grazing that has altered species composition, function and structure on these lands (Fleischner 1994). Until BLM sufficiently controls livestock grazing, and sites recover and heal, use of fire further jeopardizes many native plant communities at lower and middle elevations. Careful and selective cutting of trees is the best

N-WWP-33: A range of alternatives and actions have been identified for restoration and hazardous fuels management. Prescribed fire is not a management tool used to remove hazardous fuels under Alternative C-WFM 2.1

NGO-WWP-Fite

Comments

Responses

NGO-WWP-33 Cont-d.

strategy to reduce "encroaching" trees. However, this should only be done after surveys and review of historical records has determined that any trees are actually encroaching and livestock grazing has been sufficiently controlled. Leaving trees and branches on-site maximizes watershed values, provides safe-sites for germination of native grasses and forbs, and shades the ground surface and traps snow, thus enhancing site moisture.

Livestock Grazing and Alternatives Development

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

NGO-WWP-34

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

If BLM, using current science and following detailed inventory and assessment finds it may be suitable for livestock as a use of public lands to continue in any areas, the EIS must establish specific measurable standards of livestock grazing use as Terms and Conditions of grazing permits. A 6" stubble height must be the trigger to move livestock from springs, seeps and riparian areas. A trampling standard of 5% or less of accessible bank area with livestock trampling is another trigger/threshold that must be instituted. When the 5% trigger/threshold is crossed, livestock should be removed from the area. Riparian browse use should be 15% or less on new growth.

Upland utilization standards must be 25% or less of native species, or levels sufficient to allow a minimum seven inch **residual** herbaceous stubble height, with no grazing allowed during critical growing periods or sensitive periods for native species. 10% or less browse and breakage use by livestock should be the maximum allowed on shrubs. Winter grazing desiccates native grasses, strips them of standing material necessary to protect sensitive crowns from winter freezing, eliminates food and cover for native wildlife, and typically occurs during periods when some growth actually is occurring on native plants, and needs to be very carefully controlled and/or eliminated. Microbiotic crust damage from livestock trampling occurs at all times of years - in summer when crusts are powdery dry, and in winter or spring when moist soil conditions results in deep cow hoofprints in soft soil conditions during thaws.

NGO-WWP-34: LG 1.5 addresses monitoring data to achieve resource objectives. Specific short term monitoring criteria is established per allotment on a case-by-case basis and is an implementation level management decision. Stubble height is addressed in the Vegetation – Riparian Habitat and Wetlands BMPs, refer to Appendix B. Refer to VRW 1.1 (grazing management objectives) and FW 9.3.1 (bank alteration impacts).

NGO-WWP-35

BLM must develop a range of alternatives that rely on the implementation of measurable standards of use, coupled with significant reductions in stocking rates and active herding management by permittees, to protect lands from livestock damage. It must not backslide into the construction of even more livestock facilities, or convoluted grazing schemes when the

NGO-WWP-35: BLM has developed alternatives that comply with the mandates of FLPMA.

NGO-WWP-Fite

Comments

fundamental problem is over-stocking and over-use, and the grazing of lands that under any grazing scheme will be damaged.

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

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

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

Minimize Use of Adaptive Management

NGO-WWP-36

Agencies are increasingly relying on what is termed "adaptive management" as an excuse for not taking decisive action necessary to protect resources of public lands during planing processes. This results in a vacuum of management direction, with resources suffering. Use of adaptive management should be minimized, and a set of clear actions laid out for management situation/challenges: "If X happens, then Y will happen", not - "we'll just keep trying something different and never act to really alter situations that are causing harm".

Water Quality and Quantity

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

We have collected water quality samples on springs, seeps and headwater streams on BLM lands in the Idaho. Coliform and fecal coliform bacteria levels of hundreds of thousands are common, and degraded conditions are similar to those found in many parts of the Planning area. It is precisely these polluted waters that are often critical to declining species such as sage grouse, and to pronghorn antelope who are forced to drink what is essentially a brine of liquid livestock feces, urine and mud.

NGO-WWP-37

BLM must collect baseline water quality data on springs, seeps, streams and other riparian areas during periods of the year when livestock are present, and/or runoff is occurring, as part of this process. This is necessary to allow up-to-date and informed decisionmaking on compliance with state water quality standards and the CWA, and much-needed additions to the 303d list. It

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Responses

NGO-WWP-36: The Office of Environmental Policy and Compliance (OEPC) issued ESM03-6 provides initial guidance to all Department of Interior agencies on implementing adaptive management practices in NEPA compliance. The Winnemucca District is using adaptive management practices with respect to monitoring to determine if management actions are meeting desired outcomes.

NGO-WWP-37: FLPMA Sec. 202(c) (4) gives BLM the discretion to rely to the extent it is available, on inventory of the public lands, their resources and other values. Alternatives were developed using existing available data.

BLM is required under NEPA to provide information in NEPA documents that must be of high quality, possess accurate scientific analysis, and is subject to public scrutiny before decisions are made or actions are taken (40 CFR 1500.1.(b)). On the other hand, the purpose of NEPA is not to collect massive amounts of data but to provide data that is high quality and accurate in order to conduct a detailed analysis of issues that are truly significant to the action in question and reach an informed decision. The BLM has used available data, information based on professional evaluations and observations and applicable reference materials to support the NEPA analysis. The FEIS includes updated information, revised tables, and figures.

NGO-WWP-Fite	Comments	Responses
	includes bacterial, temperature, sediment and other data. BLM cannot merely rely on state lists - since in many cases, state agencies regulating water quality have old, or out-dated information that includes only a very limited number of sites. BLM must assess the effects of livestock-caused pollution of springs, seeps and all surface waters on recreational uses, and on aesthetics. BLM must provide for compliance with water quality standards with definite triggers and responses to water quality problems that are clearly spelled out in the EIS. Application of specific yearly water quality monitoring procedures must be a made a term and condition of livestock grazing permits in the EIS area. BLM must analyze watershed-scale impacts of livestock grazing. **FRH Assessments**	
NGO-WWP-38	In its MUD processes, Winnemucca BLM has failed to systematically collect adequate on-the-ground information on the health of the land and waters and prepare valid FRH assessments. Plus, much of BLM's limited data used in the MUD processes was old. Updated, systematic, science-based FRH assessments must be conducted across the planning area, and must be based on adequate monitoring of current conditons.	N-WWP-38: Comment noted.
	Large Livestock-Free Reference Sites	
NGO-WWP-39	BLM must designate large (greater than 10,000 acres) sites, and entire watersheds, over several representative portions of the EIS area to act as scientific reference sites to provide refugia for native species whose habitats have been degraded by livestock grazing practices and livestock facilities, and to allow evaluation of livestock grazing impacts to these wild lands.	N-WWP-39: BLM has delineated priority watersheds to protect habitat. See D-WR 1.4.
	LIVESTOCK RANGE INSTALLATIONS AND VEGETATION TREATMENTS	
NGO-WWP-40	BLM must inventory and identify all livestock facilities, range projects and zones of heavy livestock concentration such as salting or water haul sites, and present this information to the public in the EIS - wells, pipelines, troughs, spring projects, fences, cattleguards, corrals, as well as water haul sites. The location, operating condition and state of repair of all installations must be revealed to the public, as well as their cost at time of construction, and maintenance responsibility. For example, if there is a rusted out cow trough sitting surrounded by a pool of mud that resulted from a spring development, the public needs to know this. How many spring-projects have resulted in drying of the spring water source? How much water is removed from the "developed" springs, and how much remains, for all existing spring projects?	N-WWP-40: Comment noted.
NGO-WWP-41	Likewise, all vegetation treatments (seedings, chainings/railingsdings prescribed fire, post-wildfire seeding) must be detailed. How many seedings exist on these lands, and what is their current condition and productivity (compared to what the productivity was planned to be)? How are these projects or facilities fragmenting habitats for sagebrush-dependent wildlife? All direct, indirect and cumulative impacts must be identified.	N-WWP-41: The FEIS reflects additional information concerning post fire and fuel treatments.

NGO-WWP-Fite

Comments

How are these installations or treatments impacting soils, vegetation, cultural sites, habitats, etc. on adjacent lands? How are they impacting the broader landscape? BLM must provide an analysis of range installations that may be degrading important wild land sites. For example, if a cow trough is leading to increased disturbance of soils in a WSA or a cultural site or sage grouse nesting habitat, then that cow trough should be removed, and lands rehabilitated. What threats does each of these facilities pose to special status species or their habitats? BLM must examine such impacts across land ownership lines. Livestock permittees routinely clamor for more projects, and BLM - in an attempt to avoid reductions in livestock numbers necessary to protect public lands values - obliges. It is time to reverse this trend.

NGO-WWP-42

After compiling a comprehensive inventory and analysis of range installations and their impacts to native biota, BLM must identify those which are no longer working/in repair, and also those which are causing harm to special status species, raptor prey, springs, watershed, or other important public lands values, and act to remove them. It does not matter if these facilities were built pre-FLPMA or not. BLM must review all project information in its files, and thoroughly examine the facility network on-the-ground, visit all installations, collect complete and systematic information on their impacts on soils, microbiotic crusts, native vegetation, watersheds, wildlife, and cultural sites, and determine whether it is in the public interest to remove them and restore damaged lands.

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

NGO-WWP-43

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

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

Removal of Projects

In particular, BLM must assess the impacts of all wells, pipelines, water haul sites, stock ponds and other artificial upland water sources on special status species, watersheds, and native vegetation, and analyze the removal of harmful artificial livestock water sources in the EIS alternatives. These artificial water sources are resulting in serious damage to surrounding lands due to concentrated and/or increased livestock use. These facilities and the excessive livestock

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Responses

NGO-WWP-42: Impacts from range improvements are analyzed through site specific NEPA process. Removal of range improvements are addressed under Livestock Grazing section LG 5.1 and WH&B management WHB 2.2 Alternatives C & D and would similarly be analyzed on a site specific basis.

NGO-WWP-43: See Chapter 4, Environmental Consequences.

NGO-WWP-Fite

Comments

use associated with them is a serious threat to special status species. It greatly increases site vulnerability to exotic species invasion, creates habitat and behavioral conflicts with wildlife, degrades recreational experiences, etc. These artificial water sources are not compatible with achieving enhancement or restoration of damaged special status species and sagebrush sea habitats.

Water Hauling

NGO-WWP-44

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

End TNR

NGO-WWP-45

BLM should not allow Temporary Non-Renewable Use (TNR) on these lands through this EIS process. TNR use is not compatible with restoration of damaged plant communities, protection of special status species habitats, or maintenance of wildlife populations. TNR has typically occurred in the winter - when there are significant conflicts between wintering wildlife and human intrusion on special status species, raptor, big game and other winter habitats. Plus, in many areas where TNR has been issued, smaller native bunchgrasses may be growing, microbiotic crusts extensively trampled under muddy conditions, and sagebrush consumed as winter browse.

Value of Junipers and Dense Sagebrush

NGO-WWP-46

BLM must recognize values of juniper and pinyon-juniper as native tree species. In areas where junipers may be thought to be increasing, BLM must collect site-specific data to verify this information. BLM must determine first - does an "invasion" really exist? There are many scientific articles on the promiscuous burning by sheepherders and livestock in post-settlement times. In addition, there was widespread deforestation across Nevada associated with mines.

If an "invasion" actually is occurring, why is this? Have soil erosion, and the loss of native understory vegetation due to livestock grazing, actually resulted in site conditions more suitable to juniper? If so, what actions will BLM take to heal these damaged sites before undertaking any vegetation alteration?

Responses

N-WWP-44: Decisions made for hauling water are at the implementation level. Separate NEPA would be conducted.

N-WWP-45 TNR is addressed through a range of alternatives in LG 1.11. TNR is a discretionary action that may be authorized if forage is temporarily available and SRH and short term monitoring criteria have been met.

N-WWP-46: Pinyon-juniper management is defined through the various alternatives in section VF 3. The Winnemucca District has few areas where pinyon-juniper is increasing.

NGO-WWP-Fite

Comments

Any treatment should be selective hand-cutting of trees with the entire felled tree left in place. This method is selective, leaves all nutrients on site, and the structure of the felled tree helps to trap moisture on site, and provides suitable micro-habitats for native species establishment.

Due to the impacts to understories, soils, microbiotic crusts, etc. from 140 years of livestock grazing, and the looming threat of exotic species invasion in post-burn environments, burning is simply too risky. Plus, burns may extend intense use by cattle or wild horses into previously less used areas.

Please review Joy Belsky's articles on western juniper (Belsky 1997), and livestock as a causal agent of "doghair thickets" of trees in forests due to the stripping/destruction of understory vegetation (Belsky and Blumenthal 1997), available on-line at www.onda.org .

Likewise, dense sagebrush provides important nesting habitat for green-tailed towhee 9mountain big sagebrush), Brewer's sparrow, pygmy rabbit, etc.

Shrub Die-off and Drought Impacts

NGO-WWP-47

Recent die-off of sagebrush, pinyon pine and juniper has occurred on many areas of public lands. BLM must inventory and assess areas of plant die-off across these allotments and surrounding lands. How will any die-off affect habitats? What actions can be taken to minimize impacts to native wildlife? Impacts of recent on plant vigor and species composition must be assessed.

Post-Burn or Treatment Rest

NGO-WWP-48

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

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

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

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

Road Maintenance

Responses

NGO-WWP-47: Winnemucca District has limited die-off of sagebrush, pinyon pine and juniper. Some cheatgrass die-offs have occurred and BLM is monitoring and rehabilitating these areas under specific implementation actions.

NGO-WWP-48: The BLM included in the range of alternatives up to five years rest. See VR 3.1

NGO-WWP-Fite

Comments

Road maintenance must be kept under controls. BLM lands are increasingly characterized by examples of overkill in maintenance that results in blading willows, blading huge bare swaths (as weed corridors) on the roadsides, and unnecessary drainage furrows hundreds of feet long in relatively flat terrain. BLM must try to maintain and promote native vegetation on roadsides and keep them from becoming weed corridors (see Gelbard and Belnap 2003).

NGO-WWP-49

Predator Killing

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

NGO-WWP-50

Purposeful drastic alteration of predator communities takes place on an annual basis in many wild lands of the West as a result of predator killing activities conducted by APHIS/WS as a subsidy to the western public lands livestock industry. Public lands livestock grazing is often accompanied by aerial gunning, trapping, snaring, den gassing, poisoning and other methods of predator removal, aimed primarily at coyotes. Harmful impacts of removal of resident adult coyotes is discussed below under Predation. Predator removal may also actually increase predation by smaller predators in localized areas. Removal of larger predators like coyotes may result in meso-predator release where smaller predators thrive in absence of larger ones.

The placement of artificial water sources (wells, pipelines and water troughs) for livestock may increase predator impacts on sage grouse, pygmy rabbits and other sensitive species, by increasing predator distribution and density.

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

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

Weeds/Exotic Species

Responses

NGO-WWP-49: A number of Standard Operating Procedures address weeds with respect to road maintenance. Control measures for weeds and invasive species have been provided in Appendix B Vegetation - Weeds. See CA-VW 1 and Appendix B – SOPs and BMPs.

NGO-WWP-50: See response to NGO-WWP-49.

NGO-WWP-Fite

Comments	Responses
NGO-WWP-51 BLM must address domestic livestock as a primary cause of weed infestation across the EIS area lands. Livestock: travel cross-country transporting weed seeds in mud on hooves, fur and feces; create zones of intensive disturbance that are ideal sites for infestation by weeds, harm and weaken native vegetation giving aggressive exotic species an advantage. BLM must identify lands that are currently "at risk" for weed invasion, and identify specific preventative measures that will be taken to prevent their spread. BLM has shrugged aside the role of livestock in weed infestation, and thus has been largely ineffective in weed control. BLM continues to graze sites of known weed infestation, thus ensuring that infestations spread – as livestock are tremendous vectors of weed seed spread and create disturbance where weeds thrive. BLM's approach is obviously not working. BLM must take all possible measures to prevent the spread of weeds into the fairly intact native vegetation communities in the EIS area, including quarantining cattle or sheep before turnout on public lands for sufficient periods for weed seeds to pass through their systems.	N-WWP-51: There is a variety of mechanisms of weed spread. Appendix B, BMPs and SOPs provide guidance for limiting weed spread. There are numerous actions through VW 1 through 2.
NGO-WWP-52 A rapidly expanding threat in the EIS lands is white top/hoary cress, which has the potential to become established in disturbed sites - such as livestock-trampled wet meadow and spring margins, and then move out into surrounding native vegetation. BLM's past failure to act to control livestock grazing practices and reduce stocking rates has resulted in the rapid spread of this uneradicable exotic. BLM must specify actions that will be taken to prevent infestation - such as closing pastures or allotments to all grazing until weed infestations are under control. Vehicles are also a source of weed transport, so banning cross-country travel by ORVs and closing jeep trails or minor roads in lands "at risk" for weed infestation are logical ways to limit vehicle transport of exotic species seeds. RECREATIONAL USES	N-WWP-52: A Comprehensive Transportation & Travel Management Plan (CTTMP) will address these concerns after the ROD for the RMP is signed. The CTTMP will be determined with full public participation & input.
NGP-WWP-53 BLM should focus on public outreach and education (through news releases, presentations to local groups, educational outings, etc) as a key part of the recreational strategy of the EIS areas. Lands in important special status species habitats should not be available for commercialized juvenile wilderness rehab activities. For example, Idaho BLM lands have been significantly damaged by a commercial rehab group that has admitted to setting two fires, and are likely responsible for a third. Fire may result in permanent cheatgrass invasion, and long-term damage. Disturbance to lekking sage grouse, and other wildlife by such commercial uses must not be allowed (avoidance zones should be set up). BLM must fully assess all direct, indirect and cumulative impacts of any such existing uses.	N-WWP-53: Objectives R 2 and R 3 which include educational and public outreach.
Springs, Seeps, Wet Meadows, Springbrooks, Streams NGO-WWP-54 BLM must conduct a full inventory and assessment of the location, condition and characteristics of all spring, seep and wet meadow areas, including historically wetted sites. BLM must study the role of historic and ongoing livestock grazing and trampling activity (and other disturbances	N-WWP-54: FLPMA Sec. 202(c) (4) gives BLM the discretion to rely to the extent it is available, on inventory of the public lands, their resources and other values. Alternatives and analysis were developed using existing available data. BLM is required under NEPA to provide information in NEPA documents that must be of high quality, possess accurate scientific analysis, and is subject to public scrutiny before decisions are made or actions are taken (40 CFR 1500.1.(b)). On the other hand, the purpose of NEPA is not to collect massive amounts of data but to provide data that is high quality and accurate in order to conduct a detailed analysis of issues that are truly significant to the action in question and reach an informed decision. The BLM has used available data, information based on professional evaluations and observations and applicable reference materials to support the NEPA analysis. The FEIS includes updated information, revised tables, and figures.

NGO-WWP-Fite

Comments

such as roads, mining, wild horse use, etc.) in altering, degrading or desiccation of these scarce sites. The inextricable link between the health of springs, seeps and wet meadows and watersheds must be addressed.

NGO-WWP-55

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

BLM's own data and photographs provide evidence of the failure of past structural or excavational developments and its failed riparian management actions – especially accompanied by high livestock stocking rates - to protect public land values. Despite the damage it has caused in the past, BLM proposes to develop and irreversibly alter even more fragile springs.

Springs are "hot spots of "hot spots" in arid lands. 75 percent of 505 springs surveyed by Sada in northern Nevada were highly or moderately disturbed (Sada and Herbst 2001). Degradation of springs in the Great Basin is widespread. Their isolation and small size render many spring communities particularly vulnerable to disturbance and loss.
"**The continued development of springs for livestock by ranchers and state and federal agencies also poses a threat to the continued existence of spring biota**". These actions typically involve fencing off an area, immediately adjacent to springs, piping most or all of the water off the site to livestock tanks. Although some riparian vegetation may be retained, "the essential flowing character of the spring is lost, and often no exposed water remains on the surface". Livestock grazing poses a serious threat to spring communities. Livestock trampling reduces substrates to mud, can completely eliminate vegetation, and alters flow characteristics. The magnitude is likely great because of complete alteration of vegetation and substrate structure. www.biology.usgs/gov/s+t/SNT/noframe/gb150.htm

NGO-WWP-56

Sada and Pohlman (2003) provide a series of protocols to be followed to assess spring condiitons. Given the scarcity of springs across these allotments, the extreme damage that has been caused by livestock grazing and other disturbance, often coupled the ill-conceived developments that have occurred, often killing all natural water flows at spring sources, BLM must conduct Level I (locate and provide reconnaissance level characterization of springs, delineate important species distribution and salient aspects of habitat, and unique circumstances/challenges) Level II (qualitatively sample riparian and aquatic communities to determine community structure quantitatively sample salient physiochemical elements to identify aquifer affinities), and Level III Surveys (quantitatively sample to determine\aquifer dynamics, sample riparian and aquatic communities and habitats to determine spatial and temporal variation in environmental and biotic characteristics, and to quantitatively determine biotic and abiotic interactions). Identify and characterize all sites. BLM must then follow this with surveys that fully assess the ecological scene, and the effect of management and livestock use and other uses, across a broad area.

These Protocols must include collecting information necessary to assess the extreme importance of springs and the continuum of hydric and mesic vegetation communities in their vicinity to sage grouse, especially in providing essential summer brood rearing habitats (green forbs); to

Responses

NGO-WWP-55: Comment is addressed in section Vegetation – Riparian and Wetlands

NGO-WWP-56: Specific monitoring protocols are defined by BLM.

migratory birds (deciduous shrubs and trees); and many other important attributes vital to other native animals. Level III surveys can add this element. Thus, in addition to all the important issues raised for consideration, the importance to sage grouse and other wildlife must be fully considered. We believe this elevates ALL spring areas here (especially since so much damage - including harmful development - has been allowed to occur, and the potential at many sites so greatly reduced) that ALL springs, seeps, wet meadows here are worthy of restoration to whatever potential can be achieved.

We urge BLM to very carefully examine all intermittent and ephemeral drainages, as well. Often, water not only persists in intermittent and perennial drainages in pockets as a result of runoff, but seep, spring and mesic areas may be present, and interspersed along the length of these drainages. Erosion, downcutting and lowered water tables stemming from livestock grazing is often a primary cause of perennial reaches becoming intermittent. BLM must also determine if stock ponds or other livestock facilities have been built/placed/gouged into or on top of spring, seep or meadow areas. Restoration potential must be assessed, and plans must be developed to restore such sites and incrase perennial flow under all alternatives.

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

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

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

Each spring and seep is a unique combination of physical and chemical conditions (Sada and Herbst 2001, Sada and Pohlman 2003). These, coupled with disturbance factors, are dominant influences on riparian and aquatic plant and animal communities. Highly modified springs have less diverse riparian communities, and may include non-natives, and upland-associated species. Plant and animal communities associated with spring-fed wetlands are a function of physical and chemical characteristics of water and soils, proximity to other aquatic habitats, and prehistorical connections with regional drainage systems (Sada and Herbst 2001, citing Hubbs and Miller

NGO-WWP-Fite

Comments

Responses

1948, van der Kamp 1995, McCabe 1998). Primary abiotic factors that influence biotic qualities of unmodified springs include habitat persistence, geographical and geological settings, and aquifer dynamics Sada and Herbst 2001 (citing Ferrington 1995, van der Kamp 1995). Springs have a more integral connection with ground water than streams (Sada and Herbst 2001).

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

54 percent of aquatic species endemic to the Great Basin springs have suffered population losses and 62 percent have suffered major decreases because of channelization, impoundment, removing water and the introduction of non-natives. **Removing water** from springs through diversion reduces habitat for vegetation and aquatic biota by decreasing springbrook length, water width, water depth, and quantity of water available for vegetation. Groundwater pumping and surface diversion have decreased and dried up many springs and springbrooks in the Great Basin, causing loss of populations and extinctions.

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

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

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

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

This vegetation may be reduced by diversion, burning, vegetation control and grazing, so suitable habitat is eliminated or degraded, with the result that the songbird nest parasite brown-headed cowbird can more readily invade and parasitize the nests of migratory birds. Migrating birds may use spring waters to drink, and vegetation and insects associated with springs to refuel.

NGO-WWP-Fite

Comments

Migration stresses may cause insectivorous and frugivorous bird species to drink. Plus, granivorous species are more dependent on water. Birds are vulnerable to predation, and seek watering sites with greater tree and shrub cover. Areas with larger intact riparian vegetation may attract more migrants, and thus provide more prey for raptors such as Cooper's hawk or northern goshawk.

Small mammals such as voles may be endemic to spring-fed mesic alkali wetlands. Water produces insects whose aerial life forms are eaten by both birds and bats. Insectivorous birds forage on deciduous foliage.

NGO-WWP-57

A spring creates a continuum of soil conditions from wet to moist to dry, each harboring plant and animal associations adapted to those habitat conditions. BLM must systematically inventory native fauna present in and near springs, seeps and springbrooks, over at least two years. As an example of breeding bird inventories (that should also be performed in the full spectrum of vegetation communities across a range of ecological conditions in these allotments) , see Red Willow 2004, "Pinyon-Juniper and Juniper Birds". In this two-year study, breeding bird surveys were conducted in and near riparian habitats primarily in pinyon-juniper and interfacing big sagebrush communities, which are typical of much of the vegetation in watersheds supporting springs in the project area.

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

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

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

Level I Surveys: Locations, type of spring - rheocrene/limnocrene, volume of spring discharge, springbrook length and depth, wetted perimeter width, DO, temperature, conductivity, pH, percent of emergent cover, percent and type of emergent cover, percent of vegetative bank cover, springbrook bank incision, spring brook bank stability, percent of wetted perimeter covered by watercress, substrate composition, animals present. Estimate site condition and identify influences causing disturbance, i.e. level and cause of disturbance, grazing, horses, diversion. "natural disturbances" – drought, fire, scouring floods, avalanche – however – these can be exacerbated – or caused – by grazing effects.

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

Responses

N-WWP-57: FLPMA Sec. 202(c) (4) gives BLM the discretion to rely to the extent it is available, on inventory of the public lands, their resources and other values. Alternatives were developed using existing available data. Specific monitoring inventories are gathered through site specific NEPA actions.

BLM is required under NEPA to provide information in NEPA documents that must be of high quality, possess accurate scientific analysis, and is subject to public scrutiny before decisions are made or actions are taken (40 CFR 1500.1.(b)). On the other hand, the purpose of NEPA is not to collect massive amounts of data but to provide data that is high quality and accurate in order to conduct a detailed analysis of issues that are truly significant to the action in question and reach an informed decision. The BLM has used available data, information based on professional evaluations and observations and applicable reference materials to support the NEPA analysis. The FEIS includes updated information, revised tables, and figures.

NGO-WWP-Fite

	Comments	Responses
NGO-WWP-58	BLM must research any existing information on spring characteristics – flow rates, aquifer depletion, BLM's own records and project files regarding any spring or other developments, any water rights filings, any water rights surveys done by BLM, etc. BLM should also research any water rights filings by other parties on spring flows, or any waters where diversion/drilling/depletion may affect flow rates from springs in the project area (which includes other nearby lands important to special status species here, or to which springs may be linked). BLM must provide detailed descriptions of past projects – and promises made during authorizations, funding agreements, etc. and/or NEPA. This is necessary to understand all direct, indirect and cumulative impacts of actions affecting spring flows, health and hydrologic integrity. BLM must describe spring provinces/complexes/clusters, also. What type of spring is it? What functional changes or changes in biodiversity have occurred? How can function and/or biodiversity be restored? What are flow rates throughout the year – under drought or normal conditions? What is the current areal extent of wetted area vs. historical? (Examine soil profiles and characteristics, remnant plant communities, etc.). What vegetation would be present in an undisturbed site? What is the potential of the site (vegetation, flows, habitat) if livestock grazing or other disturbance is removed? Reduced by one half? Reduced by 75%? How are livestock grazing or other disturbances in the watershed affecting aquifer recharge or flow rates? How do runoff rates (and also recharge rates) from a watershed in pristine or good condition compare to the rates from watersheds in poor or fair condition? What is the condition of intermittent or ephemeral drainages in the watersheds? Is gullying, rilling, head-cutting or other erosion occurring, and how is grazing or other disturbance affecting this? What aquifer is each spring part of, and what are past, current or anticipated threats to these aquifers? How long will it take to recover flows to ¼, ½, all historically wetted areas of springs that have been highly degraded or altered through diversion? What are values of each spring as sheltering, rearing, feeding areas for sage grouse chicks, refueling stops for migrants, water for nesting songbirds across a land area, providing essential water to raptor chicks, etc.?	NGO-WWP-58: See response to comment NGO-WWP-56.
NGO-WWP-59	BLM must commit to regular scheduled monitoring of many parameters – water quality, flow rates, aerial extent of wetted area, plant species composition trampling, etc. In review of many BLM riparian documents, such as subjective PFC assessments, we have frequently noticed a bias towards rating areas in better condition if livestock grazing has not yet occurred in an area at the time the assessment is conducted. Thus, surveys must be conducted over multiple years, and must also include surveys during periods when livestock have been present for a significant amount of time – for comparison with any studies conducted in livestock-free periods. BLM cannot rely on monitoring only springs in good condition. Given the extreme damage that has occurred (and continues) here – all sites should be monitored. This must be done during the time of year when livestock are actually present in the allotment. It is especially important that BLM track sheep grazing patterns in the Sheep allotment Complex, and fall/winter/spring use areas of the other allotments, and study impacts that are occurring throughout the period when livestock are present, and that these studies be conducted over multiple grazing years.	NGO-WWP-59: See response WWP 58.

NGO-WWP-Fite

Comments

Repeatedly, we have seen Nevada BLM blame wild horses for impacts when in reality livestock, especially trespass cattle, are present during unauthorized seasons of the year and their impacts are being attributed to horses.

NGO-WWP-60

Under all alternatives, BLM must establish long-term monitoring of effects of levels and types of resource use to riparian and aquatic macroinvertebrates, quantitatively describe biotic communities. Initiate by establishing baseline conditions that identify spatial and temporal; variability in biotic and abiotic features (Sada and Herbst 2001). Quantify baseline conditions by describing changes in vegetation and invertebrate demography and assemblage structure; and the characteristics of riparian and aquatic habitats. Sample for sufficient time to encounter a broad range of environmental conditions and fluctuations in demography and structure. Long-lived species should be sampled for a long time, short-lives species – long enough to encounter environmental variability. Sada and Herbst at 12). Springs and riparian vegetation should be managed as wetlands, and they can generally be protected by **guidelines** to manage similar wetland systems such as riparian zones.

Macroinvertebrate and vegetation surveys should be conducted prior to implementing management actions that may adversely affect spring biota (Sada and Herbst 2001 at 14). These also serve as an environmental baseline to gauge any management changes. In order to be able to understand cumulative, synergistic or indirect impacts of proposed actions (and to adequately understand current conditions).

Degradation/loss of springs and other riparian areas may be caused by groundwater pumping, hot spring development, open-pit gold mines. Just to the south of the Owyhee allotment, extensive ground water depletion has occurred as a result of cyanide heap leach gold mining. Cumulative or synergistic impacts of such activities, if they affect aquifers or biota on these allotments, must be assessed. As springs associated with aquifer sources affected by gold mining in northern Nevada increasingly dry up, the springs of these lands become of even greater regional significance. BLM must weigh the relative scarcity of undeveloped springs in the Great Basin landscape, and the increasing loss of springs across the region.

Intermittent/Perennial Drainages

NGO-WWP-61

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

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

Responses

NGO-WWP-60: Specific monitoring protocols are not addressed in this RMP.

NGO-WWP-61: Specific monitoring protocols are not addressed in this RMP.

NGO-WWP-Fite

Comments

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

For all riparian areas, BLM must pay particular attention to livestock trampling impacts, as over time, trampling of clay soils near springs may seal the spring, causing it to dry up completely. Plus, BLM must assess the impacts of intense or concentrated livestock use in areas in the vicinity of riparian areas, i.e. troughs or dug out ponds outside small exclosures. BLM must collect detailed water quality measurements throughout the time when livestock are present, as well as during spring runoff to assess livestock impacts to water quality. BLM must fully consider the relative scarcity of these values in the arid landscape when balancing uses.

Desertification and Watersheds

There is an extensive body of scientific literature on desertification of watersheds, including in the western United States. Desertification is defined as: "a change in the character of the land to a more desertic condition", involving "**The impoverishment of ecosystems as evidenced in reduced biological productivity and accelerated deterioriation of soils** and in an associated impoverishment of dependent human livelihood systems". See Sheridan 1981, CEQ Report 1981 at iii. Major symptoms of desertification in the U. S. include: declining groundwater tables; salinization of topsoil or water; reduction of surface waters; unnaturally high soil erosion; desolation of native vegetation (Sheridan CEQ at 1). The existence of any one can be evidence of desertification. As lands become desertified, they become **less productive**, and activities such as livestock grazing become **less sustainable**. Continuing activities like livestock grazing may result in grazing becoming permanently unsustainable across the landscape. In many areas of these allotments, ecological conditions because of desertification and degradation processes that has already occurred and which is still underway, have already crossed the threshold between sustainability and, essentially, "mining" of increasingly **non-renewable** natural resources. Desertification can be both a patchy destruction, often exacerbated by drought, as well as as **the impoverishment of ecosystems within deserts**.

NGO-WWP-62:

The EIS must assess the levels and degree of desertification that have occurred across these lands. This is necessary to understand the suitability of these lands for livestock grazing, the productivity and carrying capacity of these lands for grazing, the effects of any alternatives developed here, the ability to meet any objectives, and the ability to sustain, enhance or restore habitats and populations of special status and other important species and native plant communities . For example, how has the extensive depletion of understories in many areas of Wyoming big sagebrush and salt desert shrub vegetation affected the degree and rate of desertification processes? How has this affected livestock patterns of use, acres per AUM, etc.? What are the acres per AUM across all vegetation types in all conditions? How many acres per

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Responses

NGO-WWP-62: Comment noted.

NGO-WWP-Fite

Comments

AUM are required to sustain cattle or sheep in the lower salt desert shrub or Wyoming big sagebrush communities? What actions can be undertaken to halt desertification processes and begin recovery? BLM must also assess the combined effects of desertification and exotic species/weed increase and infestation.

Even PRIA acknowledged that production on many BLM lands was below potential, and would decline even further. To continue the current level of grazing under BLM's Decisions will result in even further loss of soil, microbiotic crusts, water, watershed integrity, wildlife habitat, and forage. BLM's Decisions (and "Proposed Action") allow livestock numbers greatly in excess of those grazed here in recent decades. The fact that AUMs/stocking rates much below the high permitted levels were actually grazed, demonstrates the continued loss of productivity on these lands.

Desertification symptoms in arid lands include: Sparsity of grass; presence of invading plant species - both native and non-native, in grass areas that have survived: plants are of poor vigor; topsoil losses - in many places, topsoil is held only by pedestals of surviving plants. Surface signs of soil erosion include: pedestaling, gullies, rills, absence of plant litter to stabilize soils.

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

The near-absence of many species of native bunchgrasses, such as larger-sized native grasses from many areas of these lands, such as the diminished state of the once abundant Indian ricegrass (*Oryzopsis hymenoides*), signals stress of overgrazing (CEQ at 19). Such losses are vividly shown in BLM's Key Area data, as shown in the Assessments.

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

This EIS process provides BLM a special opportunity to gain a better understanding of the actual capability and productivity of the vegetation and soils that meets the desires and needs of the public on these lands.

Sagebrush, pinyon-juniper and salt desert shrub vegetation communities in Nevada are now

Responses

NGO-WWP-Fite

Comments

showing signs of "extensive changes" and significant stresses, with livestock grazing and aggressive non-native weeds recognized as among important causal factors. Nevada Natural Resources Status Report 2002 http://dcnr.nv.gov/nrp01/bio02.htm . Continued grazing disturbance, degradation and weed invasion will cause native plant communities to cross thresholds from which recovery is very difficult, if not impossible. The decline in Nevada's sage grouse populations and other species dependent on arid land shrub habitats is a landscape-scale biological indicator that the loss of functions and values of sagebrush ecosystems are serious and widespread. These are also signs of desertification processes across the landscape.

Imperilment of the Sagebrush Biome

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

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

Soils, Microbiotic Crusts, Desertification Proceses

NGO-WWP-63 Livestock grazing during all periods of the year damage soils and microbiotic crusts, and increase soil vulnerability to wind and water erosion. Trampling damage to soils effects everything from burrows of native animals, to larvae of native pollinators to roots and mycorrhizae of native tree shrubs and trees. Since harms to soils are hard to quantify and monitor from year-to-year, it is essential that BLM establish upland standards of use that provide maximum protection for soils.

NGO-WWP-64 In addition, BLM must conduct annual use pattern mapping to identify zones of intense livestock use. Use in no areas of a pasture/allotment should be allowed to exceed upland standards. This means there should be no sacrifice zones to livestock - such as areas close to water sources. If standards of use - upland or riparian - are exceeded anywhere in the pasture/allotment, this should be the trigger to remove livestock.

Visual Resources

NGO-WWP-65 BLM must designate manage large areas of roadless lands greater than 5000 acres in size, and all portions of ACECS as VRM I. This is fully compatible with special status species habitat

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Responses

N-WWP-63: Management actions applicable to soils were developed through a range of alternatives in section S1. Micro biotic crusts are addressed at S 1 and S1.1.

N-WWP-64: LG 1.5 addresses monitoring data to achieve resource objectives. Specific short term monitoring criteria is established per allotment on a case-by-case basis and is an implementation level management decision. Stubble height is addressed in the Vegetation – Riparian Habitat and Wetlands BMPs, refer to Appendix B. Refer to VRW 1.1 (grazing management objectives) and FW 9.3.1 (bank alteration impacts).

N-WWP-65: Visual resource management areas are being proposed based on visual resource inventories conducted in 1982 and more recently in 2009. Lands with VRM I classification have been identified. See Figure 2 -15.

NGO-WWP-Fite

Comments

management – for example, VRM I or 2 classification would result in removal or no new construction of elevated sage grouse predator-perches in wide-open sagebrush landscapes.

Cultural Values

Important cultural sites are often located in association with rare springs, plateau rimrocks, canyons, or pinyon pine nut harvest or associated camp sites. Threats to these sites include increasingly easy road access due roads resulting from livestock facilities and management purposes. Increased or more improved roading leads to vandalism or disturbance of cultural sites.

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

NGO-WWP-66

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

The best way to protect cultural sites from looting is to limit roading and motorized access to sensitive areas. BLM must analyze significant road closures of salt site roads, or other facility roads (require routine maintenance or salt placement by horseback, limit new livestock developments - that inevitably lead to increased roading), and take other measures to limit ease of access that might damage these sites.

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

Paleontological Values

NGO-WWP-67

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

Wild Horses

Responses

N-WWP-66: Impacts to cultural resources from grazing are analyzed in grazing permit EAs. Cultural resource specialists work with ID team to develop alternatives which reduce impacts to cultural resources. Range Improvements and maintenance projects are subject to compliance with Sec. 106 of the NHPA.

Road closures are addressed at D-TA 1.6, D-TA4, D-TA-4.1.

N-WWP-67: Impacts to paleontological resources form livestock grazing is located in Chapter 4, Section 4.2.14. Site specific impacts to paleontological resources are analyzed through site specific NEPA. Impacts to paleontological resources from grazing are analyzed in grazing permit EAs and impacts to paleontological resources from range improvements and maintenance projects are analyzed in range improvement EAs. Paleontological sensitivity is analyzed utilizing the Potential Fossil Yield Classification system. Specialists work with ID team to develop alternatives which reduce impacts to Paleontological resources.

Road closures will be addressed & brought forward in the subsequent Transportation & Travel Management Planning processes.

NGO-WWP-Fite

Comments	Responses
NGO-WWP-68 While we are not wild horse advocates, and understand the ecological harms that wild horses cause to native vegetation communities, we have repeatedly witnessed Nevada BLM cutting horse numbers while at the same time keeping livestock numbers the same – or even allowing increases. BLM must conduct monitoring that carefully differentiates between the impacts of livestock and horse use. BLM must re-examine all recent decisions where horses have been cut, but domestic livestock numbers remained the same.	N-WWP-68: Action D-WHB 5.7.1 addresses monitoring and identifying adverse impacts on resources occurring as a result of livestock or WHBs. Adjustments of AUMs would be made to the class of use (ie: livestock, WHB) on a proportional basis.
Permit Buyout/Retirement NGO-WWP-69 Federal legislation implementing a buyout of grazing permits and the permanent removal of livestock grazing from the affected lands is a very reasonably foreseeable development in public lands management in the EIS area within the next few years. BLM must recognize this in its EIS process, and identify allotments the high priority for permanent protection of many of these lands – such as the better condition sagebrush communities - from livestock grazing impacts, and the value of permit buyout for restoration purposes, to protect critical habitats, to protect cultural sites, to reduce conflicts with wildlife and recreation uses, etc. Such clear identification of lands in the EIS will also streamline any permanent allotment closures that may go through a LUP Amendment process. BLM must take all measures necessary in to make allotment closures as easy as possible.	N-WWP-69: At such a time that federal legislation is passed BLM would be required to implement the provisions of such legislation. Relinquishment of grazing permits is addressed at D-LG 1.9 and D-LG 1.9.1.
Land Retention NGO-WWP-70 BLM should pursue acquisition of additional lands located in key habitat areas identified in the EIS process, with BLM acquisition of private inholdings through purchase with Land and Water Conservation funds or other conservation funding. BLM should strive for no net loss of public lands, including retention of significant blocks of lands where checkerboarding now exists.	N-WWP-70: BLM continues to acquire environmentally sensitive lands using various funding sources. Acquisition of environmentally sensitive lands is included at D-LR 4.0 and D- LR 4.1.
Off Road Vehicles, Roading, Road Closures NGO-WWP-71 FLPMA requires that BLM prevent unnecessary or undue degradation of the public lands. We are concerned with the proliferation of OHV use by the public, and some livestock permittees. BLM must end all OHV races throughout sensitive special status species habitats. Holding an OHV race in wild lands causes irreparable damage. Trails driven by modern high-powered motorbikes have their soils pounded into concrete, with permanent damage to soils and vegetation. Where trails go up hills, gully formation processes are set in motion. Plus, both the racers and spectators are enticed to re-visit the lands where races occur - with use proliferating in areas where races are held. OHV use should be limited to only existing roads, and only within certain areas. Any trails off the designated roads must be slated for restoration.	N-WWP-71: The PRMP designated areas open, closed, and limited to OHV travel. Over 6.9 million acres of public land were designated from open to limited. A Travel and Transportation planning process will begin following the RMP that will address designation of routes open and restoration of routes.

NGO-WWP-Fite

Comments

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

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

Road Rehab/Restoration

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

NGO-WWP-72

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

BLM must identify methods of road closure and restoration.

Utility Corridors/Rights of Way

NGO-WWP-73

BLM must strengthen environmental protection for all rights-of-way on EIS lands. Protections include: Limiting use during sensitive nesting, fawning, wintering or other periods of use for all native wildlife, assessing impacts of rights-of-ways on spreading exotic species onto surrounding lands and revocation of rights-of-way when weed infestation or wildlife disturbance results. BLM's planning process must not authorize new utility corridors, and must re-examine the suitability of existing corridors. All direct, indirect and cumulative impacts of mining, wind, geothermal, and other energy development on populations of special status species or aquifers across the EIS region must be considered.

Economic Analyses

NGO-WWP-74

Any economic analysis involving these lands must clearly identify that changes in livestock numbers in most lands here will not be affecting small ranchers. Instead, they mostly involve a huge corporate entities or land speculators that may in reality return a minuscule amount to the local economy. The quite minor economic importance of public lands ranching in the Planning area must also be studied here.

Responses

N-WWP-72:
A Comprehensive Transportation & Travel Management Plan will address these concerns after the ROD for the RMP is signed. The CTTMP will be determined with full public participation & input.

N-WWP-73: Many of the environmental protection measures suggested are included in existing SOPs and BMPs, Appendix B and site specific permit actions based on appropriate NEPA analysis.

N-WWP-74: Planning criteria 2 (Volume 1, Page 1-11) states the scope of analysis will be consistent with the level of analysis in approved plans and in accordance with BLM standards and program guidance. The socio-economic analysis is consistent with the level of analysis for RMPs as required in BLM Handbook H-1601-1.

Analysis of livestock grazing effects on social and economic conditions is analyzed on pages 4- 726 through 4-728 of the Final EIS. Data used in the analysis derives from tax dollars and receipts based on authorized grazing permits as reflected in the Socioeconomic Report (Volume 5, Appendix H).

See pages 2-35 through 2-40 of Appendix H for the discussion and economic statistics related to livestock grazing administration. Economic data related to other resources and programs administered by the agency are also included in Appendix H.

NGO-WWP-Fite

Comments

NGO-WWP-74 Cont-d

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

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

Geology

NGO-WWP-75

Large mineral, Oil and gas, geothermal and wind energy siting withdrawals must be made as part of this planning process. These activities should be precluded by withdrawals in all biologically sensitive, roadless or other important lands. For example, all identified sage grouse habitat should be withdrawn from ALL mineral, oil and gas, geothermal, wind energy and biomass energy activity – including both exploration and development due to the extensive habitat fragmentation that these activities would cause.

Access

NGO-WWP-76

"Sagebrush rebel" mindsets plague some local viewpoints of Nevada BLM lands. This may result in closures of long-used primary access roads that cross slivers of private lands, or illegal road activity on BLM lands. BLM in this RMP effort must solidify the rights of the public to access public lands. If ranchers block access, BLM should purchase easements, or condemn private lands if they are an impediment to a long-established right-of-way. Providing a right-of-way across base properties should be a requirement of holding a public lands grazing permit. Private land owners should NOT rewarded with issuance of a right-of-way if they unlawfully blade roads on public lands, or engage in other such activities to assert a right-of-way.

Roads Dissect Habitats and Provide Weed and Predator Corridors

Direct effects of roads are destruction of habitat and disruption of dispersal corridors. Indirect effects of roads are cumulative and involve changes in plant and animal community structure and ecological processes. Roads fragment and isolate populations in species that are hesitant to cross them. Direct habitat loss, facilitated invasion of weeds, pests and pathogens, altered predation rates – are all a consequence of roading.

Many weedy plants dominate and disperse along road sides. Opportunistic animals benefit from roads. Edge effects are now seen as harmful consequences of habitat fragmentation for many native species. Indirect effects include increased human access, OHV use, hunting, human-caused wildfires, Roads diminish native diversity of ecosystems. Many roads in rugged western

Responses

NGO-WWP-75: For most mineral resources withdrawals are included. Saleable, fluid, and solid minerals have use restrictions applied within priority wildlife habitat, priority watersheds, and sensitive species habitat areas.. See responses NGO-WWP-Fite 192 and 193.

NGO-WWP-76: Easements are addressed under LR 7. LR7.1 presents a range of management actions that include provision for accessing public lands by acquiring easements from private land owners.

NGO-WWP-Fite

Comments

terrain follow streamcourses, so are constructed through the middle of big sagebrush sites following drainages and draws that are critical as dispersal corridors for pygmy rabbits.

Roads further fragment wildlife habitats and dispersal corridors, and serve to isolate wildlife populations. Energy development and production activities require vast networks of new roads, cutting across sagebrush habitats, as previously described.

Mining, oil and gas, geothermal and wind development, cause extensive new roading. Roading associated with exploration and development results. Roading facilitates weed spread.

Powerlines Dissect Wildlife Habitat, Provide Raptor Perches, Result in Increased Predator Travel Corridors and Weed Spread

NGO-WWP-77

Powerlines are known to isolate and impact sage grouse populations. Sage grouse use of areas near powerlines increases as distance from the powerline increases for up to 600 m., plus powerlines reduce the security of sage grouse populations in linear strips up to greater than 1 km. in width (Braun 1998). Powerlines may follow roads, or cut cross country through otherwise unfragmented sagebrush habitats.

Residential development throughout the Intermountain West is accompanied by networks of powerline and utility lines, and a resulting myriad of raptor perches.

Many large utility corridors already slice through Nevada. See Nielsen et al. (2002) Renewable Energy Atlas. New powerlines accompany rapidly expanding energy and mineral development in the West. With an emphasis on accelerated energy development in rural and remote areas of Nevada and Idaho, new power networks and powerlines could proliferate. See Nevada Wind Power Development Strategic Plan 2002, BLM geothermal Website information, 2/21/03 DOI/DOE Press Release "Assessing the Potential for Renewable Energy on Public Lands", and "Assessing the Potential for Renewable Energy on Public Lands" DOE/BLM 2003 www.osti.gov/bridge. These will require major powerline/rights-of-way accessing remote sites, as well as networks of ancillary power line systems to relay energy to major transmission lines (Nevada Wind Power Development Strategic Plan 2002).

Powerlines often cut cross country, accompanied by maintenance roads that may serve as travel corridors for predators, weed infestation, hunters, etc. Geothermal and wind development are accompanied by extensive powerline proliferation and agency issuances of rights-of-ways. This RMP planning process must sharply limit new powerlines.

Vegetation Treatments Prime Lands for ORV Intrusion

NGO-WWP-78

We are very concerned about the ensuing off-road impacts of any BLM fire and vegetation treatments causing increased soil disturbance, "brush clearing", cross country travel in the course of conducting projects (prescribed fire, mechanical thinning of woody vegetation, mowing, brush-beating, etc.), all of which are likely to lead to easier and increased OHV travel and new roading. BLM must consider this very negative impact of vegetation removal. Landscape scars

38

Responses

NGO-WWP-77: BLM must comply with the multiple use mandates of FLPMA and the National Energy Policy Act to facilitate the development of renewable energy sources. BLM utilizes mitigation measures, grant stipulations, SOPs and BMPs to guide the issuance of rights-of-way associated with renewable energy projects to reduce potential impacts to resources. All Renewable Energy Plans of Developments are further required to be reviewed under NEPA.

NGO-WWP-78: A Comprehensive Transportation & Travel Management Plan (CTTMP) will address these concerns after the ROD for the RMP is signed. The CTTMP will be determined with full public participation and input. Impacts from vegetation treatments are addressed in separate NEPA documents based on site specific implementation actions.

NGO-WWP-Fite

Comments

and areas cleared by "treatments" entice motorized users, and take a very long time to heal in big sagebrush habitats.

Military Training Impacts Must Be Assessed

N-WWP-79

Impacts of military activities or overflights on public lands must be fully assessed in this land use plan process, and the impacts – use of flares causing fires, noise or low level flights interfering with recreational uses, etc. must be fully addressed.

Hard Rock Mining Exploration, Development and Expansion Threaten Big Sagebrush Habitats

Extensive cyanide heap leach gold mining and other forms of hard rock mining occurs in many areas of Nevada. Plus, mines frequently are located on the lower slopes of ranges, so the zone of extensive disturbance and infrastructure, when located on north-south running Great Basin ranges serves to slash across possible north-south sagebrush linkages and dispersal corridors, and further isolate any remaining pygmy rabbit populations.

Continued livestock grazing disturbance, increased agency vegetation manipulation projects and wild and prescribed fires will progressively increase cheatgrass occurrence at higher elevations, as cheatgrass is known to invade soils disturbed by livestock, fire, fire break construction, and mechanical equipment operation throughout the range of the pygmy rabbit.

Communication Sites

N-WWP-80

BLM must analyze the suitability of all existing/pending communication sites as part of the RMP process. Are these sites marring wild land settings? If so, they should be removed.

Specific limited communication site areas should be established, based on minimal impacts to wild lands. Various companies must clump towers and developments in these sites, and not each pioneer a new area.

Communication sites intrude on scenery, are typically accessed by roads with significant long-lasting road cuts, etc. Sensitive sites should be withdrawn from communication site development as part of the RMP process.

Where are the migratory bird migration corridors in the Planning area lands? These must be identified, and these corridors closed to ANY communication or energy tower siting.

Utility Corridors/Rights-of-way

N-WWP-81

BLM's planning process must not authorize new utility corridors. These corridors open the way for a proliferation of energy developments, and have significant environmental impacts that are directly counter to the goal of restoration.

Responses

N-WWP-79: Military Over Flight areas are designated by the military and the FAA.

N-WWP-80: Communication sites are addressed in management objective LR 6 and associated actions which addresses protection of WSAs, ACECS and Wilderness areas. Location of new communication sites are addressed at the project specific level through the NEPA process.

N-WWP-81: Designated corridors were developed from the West-Wide Energy Corridor-Final Programmatic EIS (2008).

NGO-WWP-Fite

	Comments	Responses
NGO-WWP-82	BLM must strengthen environmental protection for all rights-of-way on these lands. Protections include: Limiting use during sensitive nesting, fawning, wintering or other periods of use for all native wildlife, assessing impacts of rights-of-way currently held on spreading exotic species onto surrounding lands. Criteria for revocation of rights-of-way if environmental harms (weed spread, significant wildlife disturbance) are occurring must be established. A bonding requirement for any right-of-way must be established by this RMP. The bond must be sufficient to restore the land at the termination of the right-of-way, as ell as to mitigate all environmental harms that stem from right-of-way construction and other or ongoing activities.	NGO-WWP-82: A range of management actions addressing weeds has been included in Section VW 1. BMP/SOP applicable to weed management are located in Appendix B. Bonding of ROWs is subject to ROW regulations at 43 CFR 2800.
NGO-WWP-83	The need to preserve wild untrammeled vistas, primitive and undeveloped wild land settings and the darkness of night skies must be the guiding principle in any right-of-way issuance, or utility corridor consideration.	NGO-WWP-83: See response NGO-WWP-81. VRM of viewshed is provided at D-VRM 2, CA-VRM 2.1, and D-VRM 2.1.
	Wind Energy Sites Please apply the previous discussion to the siting of all energy projects (wind, solar, etc.).	
NGO-WWP-84	No siting of energy facilities should be allowed in biologically or culturally important wild land areas. Large areas must be withdrawn from use as energy production sites as part of this RMP planning process.	NGO-WWP-84: Delineated ROW exclusion areas were established based on lands containing important wildlife habitat and other resource values. See – D-LR 5.4.
	Weeds/Exotic Species	
NGO-WWP-85	BLM must take all possible steps to prevent the spread of weeds into native vegetation communities. Weeds are spreading at alarming rates on arid western lands. BLM must first recognize that domestic livestock are the primary cause of weed infestation on BLM lands. Livestock: Travel cross-country transporting weed seeds in mud on hooves, in fur, in feces. They create zones of intensive disturbance that are ideal sites for initial infestation by weeds. They prime sites for weed invasion by harming and weakening native plant communities, providing bare soil sites for aggressive exotic species invasion. See Belsky and Gelbard (2000). BLM must inventory all lands and assess their vulnerability to weed infestation. Strong preventative measures necessary to stem and reverse the tide of weed invasions must be identified and put into action. In the past. BLM has shrugged off and ignored the role of livestock in wed infestation. Its only attempt at control was spraying the most obvious weed patches, taking no efforts to revegetate the "nuked" sprayed sites, and continuing to let livestock graze as normal and continue to spread weeds. This head in the sand approach has resulted in the alarming weed problem we now face. Knapweeds are rapidly expanding in Planning area lands. These are spread by livestock, and once established in disturbed areas move aggressively into surrounding lands. They are also spread along disturbed road areas, and by vehicles.	N-WWP-85: There is a variety of mechanisms of weed spread. Appendix B, BMPs and SOPs provide guidance for limiting weed spread. There are numerous actions through VW 1 through 2 that address weed control.

NGO-WWP-Fite

Comments

Livestock should be quarantined for a period of 4 days before entering public lands, and be fed only weed-free hay. Any lands with known weed infestations should not be grazed until the weed problem is addressed, and weeds have been eradicated. Livestock grazing must be sharply restricted or ended on lands at risk to weed invasion. Livestock projects that result in concentrations of animals and epicenters of weed infestation should be removed, and disturbed sites restored.

NGO-WWP-86

Roads and vehicles are also a major source of weed transport, and soil disturbance that creates ideal sites for weed infestation. Banning cross-country travel by ORVs, closing and restoration of roads and ways in wild lands "at risk" for weed invasions are logical ways to limit spread of weeds. Limiting road maintenance activities is also important, as the blading of ever-widening shoulders on gravel and dirt roads provides an ideal site for weed infestation and then outward spread.

NGO-WWP-87

Various mineral and energy exploration activities involve significant cross-country travel by heavy equipment that disturbs soils and/or spreads weed seeds. These activities should be prohibited in all lands with known weed infestation, or which are identified as being "at risk" for weed invasion or spread.

NGO-WWP-88

BLM's RMP must make land use allocations that prevent lands from undergoing weed infestation. As you may be aware, WWP, CHD, ALA, NCAP and others have submitted a Citizens Alternative to BLM for its Weed EIS (which appears to have been put on permanent hold ????). Our alternative addresses causes of weed infestation, and provides actions to address those causes. These actions include changes/reductions/cessation of livestock grazing, road closure and other actions that are aimed at effectively addressing causes of weed invasion and spread. We have been endlessly told by Brian Amme, BLM's Weed EIS planner, that it is at the RMP level where BLM makes forage allocations and other decisions that address causal factors of weed invasion. So, according to BLM's own planners like Mr. Amme, it is BLM's task, in the RMP to effectively address causes of weed invasion.

We are attaching the Citizens Alternative so that you can incorporate its concepts into the new RMP. Please feel free to contact us if you need any more information or clarification. The official BLM party line is that the RMP is the vehicle to address causal factors of weeds, in making land/land use allocations. This is what you need to do.

NGO-WWP-89

BLM must also address measures to restore lands where weeds have been treated. Instead of spraying large areas with lingering herbicides that result in large "dead zones" in soils, and then continuing status quo grazing – which typically results in weeds thriving while all native vegetation on the site perishes – you must remove livestock grazing/vehicles – whatever the disturbance factors are to a site – until it is fully restored with native vegetation, healthy microbiotic crusts, etc.

Darkness of Night Skies

Responses

NGO-WWP-86: A Comprehensive Transportation & Travel Management Plan (CTTMP) will address these concerns after the ROD for the RMP is signed. The CTTMP will be determined with full public participation and input. A number of Standard Operating Procedures address weeds with respect to road maintenance. Control measures for weeds and invasive species have been provided in Appendix B Vegetation -Weeds.

NGO-WWP-87: D-R 10.2 delineates OHV travel management areas. Proposed use of heavy equipment would be evaluated for federal actions that by site specific NEPA analysis.

NGO-WWP-88: BLM has complied with requirements of FLPMA and NEPA and developed a reasonable range of alternatives applicable to weed management and have included in Appendix B - Weeds- a number of SOPs/BMPs applicable to weed management in order to limit the spread of weeds and invasive species.

NGO-WWP-89: Actions D-VR 2 and D-VR 2.1 address management of seedings and restoration. Seeding fuelbreaks is an implementation action done on a case-by-case basis subject to separate NEPA compliance and public involvement. See – D-VR 3.0, D-VR 3.1, D-VR 4 and D-VR 4.1.

NGO-WWP-Fite

Comments

NGO-WWP-90

The RMP effort must manage lands and resource activities to protect the darkness of night skies, which is an attribute of wild lands increasingly sought by the recreational public.

Clear Desert Air

NGO-WWP-91

BLM must act in any ways possible in the Land Use Planning process to protect clear desert air and scenic vistas.

We look forward to working with you in moving forward with actions to protect and enhance these nationally significant public lands. Please contact us if you need clarification or additional information on any of the above comments.

Sincerely,

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Responses

NGO-WWP-90: There is no national policy in place on night sky preservation. BLM Encourages project proponents to develop minimum lighting plans utilizing; 1) Enclosed parking areas vs. overhead lighted parking lights; 2) zoned or portable lighting – ie lights only where night work is needed; 3) lights actuated by remote control, timing mechanism or motion sensors; 4) pedestrian path lighting using directional cut-off luminaries vs. overhead lighting; & 5) Use on-demand audio/visual warning system lighting on facilities over 200 ft. vertical (FAA currently evaluating). Impacts from lighting are addressed on a case-by-case basis through a separate NEPA and public involvement process.

N-WWP-91: Air quality is addressed in Table 2-1, starting with D-AQ 1.

NGO-WWP-Fite

Comments

Responses

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NGO-WWP-Fite

Comments

Responses

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Responses

NGO-WWP

Comments

Jon Marvel <jon@westernwatersheds.org>

10/18/2010 01:55 PM

To Robert Edwards <robert_edwards@blm.gov>
cc Katie Fite <katie@westernwatersheds.org>
Subject Winnemucca Draft Resource Management Plan/EIS Comments

Bob:

Thanks for your time this morning.

For purposes of your discussion this afternoon, please consider the following language as suitable for inclusion in the Final Resource Management Plan/Environmental Impact Statement for the Winnemucca District BLM.

The following language is from the Challis, Idaho BLM RMP of 1999 but has been edited somewhat in order to clarify the intent. If you should be interested in the original wording please let me know:

NGO-WWP-1

Grazing privileges that are lost, retired, relinquished, canceled, or have base property sold without transfer shall have attached AUMs held for watershed protection and wildlife habitat.

Also in regard to reallocating forage from livestock to wild horses and/or burros on grazing

Responses

NGO-WWP-1: Relinquishment of grazing permits is addressed in C-LG 1.9.

NGO-WWP

Comments

Responses

NGO-WWP-1 Cont-d

allotments that are waived without preference or become vacant for some other reason, I suggest language as follows for your RMP:

Grazing privileges on allotments that include all or part of existing wild horse and burro Herd Management Areas that are lost, retired, relinquished, canceled, or have base property sold without transfer shall have attached AUMs held for watershed protection and wildlife habitat; or, alternatively such AUMs may be reallocated for wild horses and/or burros provided the allotment is meeting all applicable Nevada Standards and Guidelines for Healthy Rangelands.

NGO-WWP-2

In regard to the growing issue of authorizing wild horse and burro sanctuaries as proposed by Madeleine Pickens, I believe that current BLM authority to permit domestic livestock grazing will apply since the horses and/or burros in such sanctuaries will not be wild or free-roaming and will be owned by the non-profit foundation. Those animals therefore are not subject to the Wild Free-Roaming Horse and Burro Act (Public Law 92-195), but can be addressed under a livestock grazing permit.

NGO-WWP-3

I also suggest the RMP contain a ratio for translating or reallocating cattle or sheep AUMs into horse and burro AUMs of ***1.8 cattle AUMs or 9 sheep AUMs to 1 horse or burro AUM*** . That way the year-round effects of horses on sanctuaries or on vacant or waived allotments can be taken into account.

I think you will find your Solicitor will agree that the inclusion of these clauses in your new RMP will not violate FLPMA or the Taylor Grazing Act in any way.

Call me if you have questions and please accept these comments as official WWP comments on the draft RMP/EIS for the Winnemucca District BLM.

Thanks !

Jon Marvel
Executive Director
Western Watersheds Project
P.O. Box 1770
Hailey, ID 83333
208-7882290

NGO-WWP-2: This action is an implementation level decision, not an RMP level decision. During the implementation level planning process separate public involvement, NEPA analysis, and compliance with the Wild Horse and Burro Act would be required.

NGO-WWP-3: Comment noted.

NGO-WWP-Marvel

Comments

Jon Marvel
<jon@westernwatersheds.org>
10/25/2010 03:59 PM

To <wdrmp@blm.gov>, Robert Edwards <robert_edwards@blm.gov>
cc
bcc
Subject Additional WWP Comments on the Draft Winnemucca RMP/EIS

These are comments from Western Watersheds Project (WWP) are in response to the Draft Winnemucca Resource Management Plan and Environmental Impact Statement (DRMP/EIS).

These comments are in addition to those submitted on behalf of Western Watersheds Project by WWP's Biodiversity Director Katie Fite also dated today (October 25, 2010).

NGO-WWP-Marvel-1

WWP requests that all alternatives in the Final RMP/EIS include this authorization for protection of waived federal grazing permits:

Grazing privileges that are lost, retired, relinquished, canceled, or have base property sold without transfer shall have attached AUMs held for watershed protection and wildlife habitat.

Respectfully submitted this 25th of October, 2010.

Please keep the Hailey office of WWP fully informed of the availability of all future public documents in this RMP development process.

Thank you !

Jon Marvel
Executive Director
Western Watersheds Project
P.O. Box 1770
Hailey, ID 83333
208-788-2290
jon@westernwatersheds.org

Responses

NGO-WWP-Marvel-1: Language is contained in the RMP which allows relinquishment of grazing permits. Refer to LG 1.9.

Comments

Western Watersheds Project
P.O Box 2863
Boise, ID 83701
Tel: (208) 890-3666
Web site: www.WesternWatersheds.org

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2010 NOV -4 PM 3:06

Working to protect and restore Western Watersheds

Western Watersheds Project

November 2, 2010

Winnemucca RMP
c/o Bob Edwards
Bureau of Land Management
Winnemucca District Office
5100 E. Winnemucca Blvd.
Winnemucca, NV 89445

RE: Winnemucca RMP

Please find enclosed a CD with documents which are to supplement the comments submitted on the Draft Winnemucca RMP.

Kenneth Cole

Western Watersheds Project
PO Box 2863
Boise, Idaho 83701
208-890-3666

Katie Fite

Biodiversity Director
Western Watersheds Project
PO Box 2863
Boise, Idaho 83701
208-429-1679

Responses

Attachment documents were reviewed and considered by BLM; however, they are not included in this Appendix. To view these documents contact the Winnemucca District Office at 775-623-1500, or via e-mail at wfoweb@blm.gov.

Comments **Responses**

Attachments

- Effects of Noise on Terrestrial Organisms.pdf
- Great Basin National Park - Lightscape _ Night Sky (U.S. National Park Service).pdf
- Haugo2010 Influences of climate, fire, grazing, and logging on woody species composition along an elevation gradient in the eastern Cascades, Washington.pdf
- Jarbidge AMS July 2007.pdf
- Jarbidge Carter Grazing Considerations RMPJC review.pdf
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Bighorn Sheep and Domestic Sheep

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- James A. Akenson, Bighorn Sheep Movements and Summer Lamb Mortality in Central Idaho, Bienn. Symp. North, Wild Sheep and Goat Counc., 8;14-27 (1992).pdf

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- John E. Gross, et al., Effects of Disease, Dispersal, and Area on Bighorn Sheep Restoration, Restoration Ecology, 8 (4S), pp. 24-38 (December 2000).pdf
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- Lawrenceetal2010.pdf
- Letter from David A. Jessup, CA Dept. of Fish and Game to Pattie Souchek, Forest Planner, Payette National Forest re Disease Transmission Between Domestic and Bighorn Sheep (July 31, 2006)..pdf
- Marine Wildlife Veterinary Care and Research Center - Wild and Domestic Sheep Disease Workshops main page.pdf
- Memorandum from Deputy Assistant Director, Renewable Resources and Planning (US DOI – BLM) to AFOs re Revised Guidelines for Management of Domestic Sheep and Goats in Native Wild Sheep Habitats DD; 9-30-98 (July 10, 1998).pdf
- Miller et al (2008) Pasteurellosis Transmission Risks between Domestic and Wild Sheep.pdf
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Comments

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Climate Change-Desertification

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Domestic Sheep

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- ZIMMERMAN (1984) Livestock Grazing Influences on Community Structure, Fire Intensity, and Fire Frequency within the Douglas-Fir-Ninebark Habitat Type.pdf

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- A Map of Annual Grasses in the Owyhee Uplands, Spring 2006, Derived from Multitemporal Landsat 5 TM Imagery.pdf
- Annual Grass Index for the Owyhee Uplands, 2006.pdf
- Bartuszevige_&_Endress_(2008)_Do_ungulates_facilitate_native_&_exotic_plant_spread.pdf
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- Cottam and Evans 1945 A Comparative Study of the Vegetation of Grazed and Ungrazed Canyons of the Wasatch Range, Uta.pdf
- ELLISON (1960) Influence of grazing on plant succession of Rangelands.pdf

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