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From: [Rebekah Stetson](#)

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To: [BLM_HQ_GRSB_Planning](#)

Subject: [EXTERNAL] Sage Grouse Working Plan Comments from the Coalition for Healthy Nevada Lands

Importance: Normal

Sensitivity: None

Attachments:

[CHNL Sage Grouse Working Plan Comments 2-8-22.pdf](#) 

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Pat,

Thank you again for taking my call this morning. Please find our comments attached and please do reach out for any ways that our coalition may be of help to you! Thank you so much for all that you do!

In gratitude,
Rebekah

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COALITION FOR



HEALTHY
Nevada
LANDS



February 8, 2022

Patricia Deibert
National Sage Grouse Coordinator
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Salt Lake City, UT 84101

Dear Ms Diebert:

Thank you very much for your time in taking my call this morning. The Coalition for Healthy Nevada Lands, Wildlife and Free Roaming Horses is a diverse group of passionate environmentalist and steward volunteers who work towards achievement of healthy rangelands, wildlife populations and free-roaming horses and burros through information, education, science, and ensuring effective management of free-roaming horses and burros.

Coalition Members

Rebekah Stetson, *Former President, Nevada Wildlife Federation, Chairwoman, Coalition for Healthy Nevada Lands, Ecosystem Health Consultant*

Willie Molini, *Former Director Nevada Department of Wildlife, Nevada Sagebrush Ecosystem Council*

Mike Cox, *Wildlife Staff Biologist, Nevada Department of Wildlife*

Karen Boeger, *Founding Board Member, Friends of Nevada Wilderness, Director, Coalition for Nevada's Wildlife*

James Sedinger, *Foundation Professor of Wildlife Ecology Professor of Wildlife Ecology, Emeritus*

Keely Hopkins, *Pacific States Assistant Manager, Congressional Sportsmen's Foundation*

Tina Nappe, *Conservationist, Former Nevada Wildlife Commissioner*

Pat Bruce, *Stewardship Program Director, Friends of Nevada Wilderness*

Judi Caron, *Director, Coalition for Nevada's Wildlife*

David Ricker, *Policy Chair, Backcountry Hunters and Anglers*

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Coalition for Healthy Nevada Lands, Wildlife and Free-Roaming Horses

Our Goal – Achievement of healthy rangelands, wildlife populations and free-roaming horses and burros through information, education, science, and ensuring effective management of free-roaming horses and burros.

We appreciate the opportunity to provide comments on the analysis in the Environment Impact Statement for the 2021 Sage Grouse Land Use Plan Amendments.

Sage-grouse populations have declined substantially in Nevada since the U.S. Fish and Wildlife Service (USFWS) declined to list them in 2015. An important contributor to USFWS's decision process was the substantial effort made toward conservation and promises of future efforts, many of which were included in BLM plans developed at the time. It is apparent to us that, once the threat of listing was removed both public agencies and the private sector relaxed their efforts for sage-grouse conservation. While numerous anthropogenic disturbances like mining and energy development have impacted sage grouse, we focus here on the impacts of grazing by free-roaming horses and livestock because these two activities affect nearly all of sage grouse range. At the time of the planning for the 2015 greater sage grouse EIS, free-roaming horses and burros were conflated with livestock grazing. This is unacceptable since the management of livestock, e.g., cattle and free-roaming horses and burros are in different BLM programs and the strategies needed for meeting the BLM's goals and objectives are different in fundamental ways. Stocking rate is fundamental to all grazing management. For livestock, animal numbers remaining relatively consistent on livestock allotments with their annual gathers and a planned number turned out each year for specified grazing and no-grazing recovery period dates. Whereas with horse and burro populations the ideal is gathering to low AML at the time populations reach high AML. Unfortunately for sage-grouse and rangeland health this has not

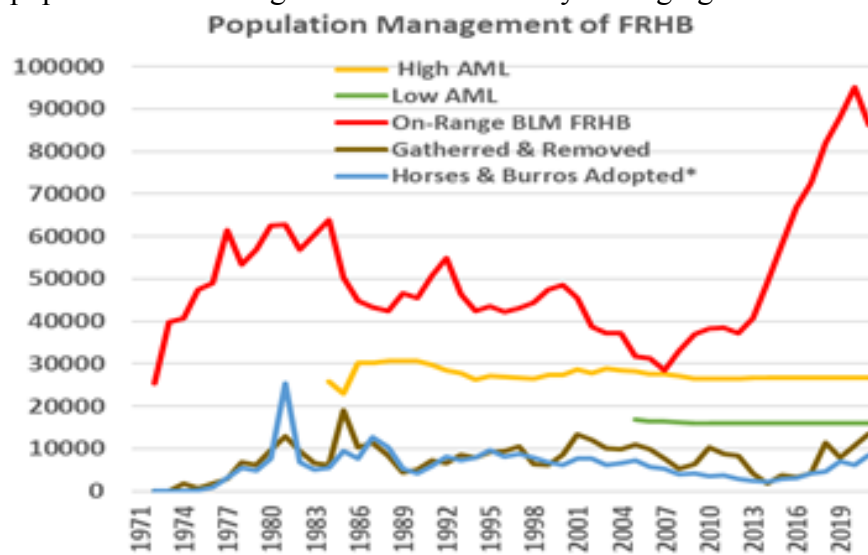


Figure 1. Horses and burros gathered and removed, adopted and on range compared to AML over fifty years (BLM 2021).

been accomplished in most herd management areas (HMAs), in spite of legal requirements and promises to do so.

Reproduction by free-roaming horses is not controlled by humans breeding for a planned foal crop. With no effective predation, constant growth causes populations to double at a constant rate (e.g. 18% annual growth= 4 year doubling time) (Symanski 1985, Garrott 2015), until limited by gathering, disease, lack of food or water. Even with some gathering, horse and

burro populations had already doubled to 58,150 in 2015 since they had finally been managed to almost high appropriate management level AML in 2007 (Fig. 1). After the 2015 GSG EIS horse and burro populations continued to grow exponentially and nearly doubled again before widespread drought.

When horse and burro numbers exceed AML, wildlife suffers. Free-roaming horses are known to behaviorally exclude numerous species of birds and mammals from riparian areas throughout

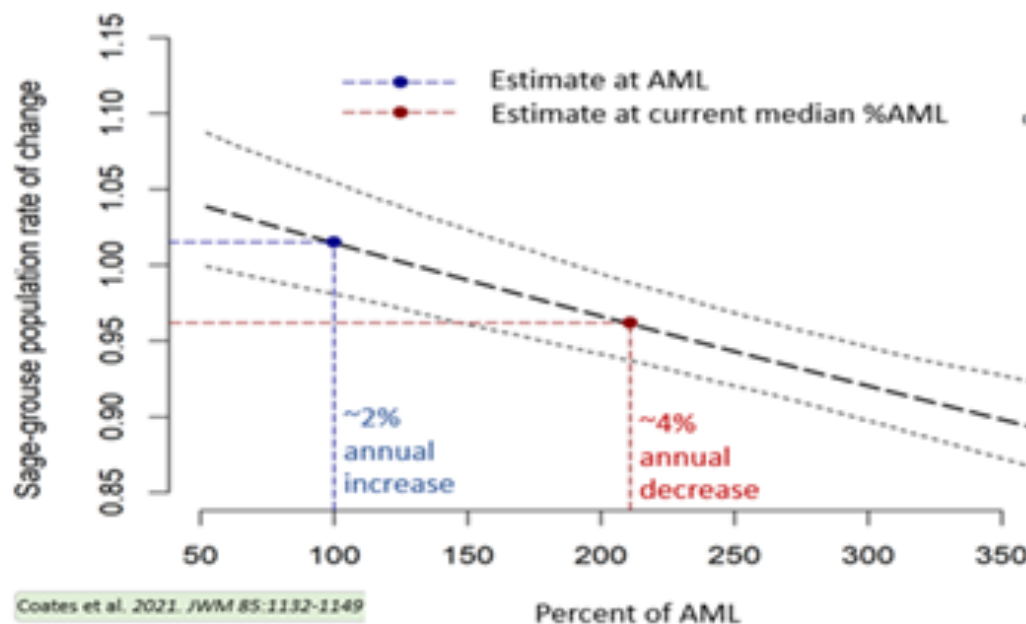


Figure 2. Rate of population increase for sage-grouse in relation to size of the local horse population relative to AML (Coates et al 2021).

behavior,

- Diminished forage and cover in nesting and early brood-rearing habitat (reduced cover increases predation)
- Less resilient ecosystems in the form of:
 - Shrinking riparian late brood-rearing habitat
 - cheatgrass/fire cycle removing sagebrush (Maestas et al. in review, Coates et al. 2021, Chambers et al. 2014, Beever et al. 2008, Davies et al. 2019, Wyman et al. 2006, Swanson et al. 2015).

These impacts and others such as accelerated loss of soil (Eldridge et al. 2020) violate the BLM's obligations to manage for rangeland health standards.

the American West.

Specifically, sage-grouse are moved off leks (Munoz et al. 2021). Population decline ($\lambda < 1$) correlates directly with % over AML of horse populations (Fig. 2).

Horse impacts to sage-grouse include:

- Altered breeding

There is an abundance of science related to effective and ineffective grazing management strategies for livestock in pastures where riparian areas create the need for riparian grazing management to focus on riparian proper functioning condition and the resource values that come with the riparian functions, such as green forbs in late summer (Wyman et al 2006, Swanson et al 2015). This is most important in the western and northern Great Basin where the summer monsoonal influence is minimal (USDA NRCS 2006) and where riparian functions are needed



Figure 3. Late brood-rearing habitat shrinks as riparian areas lose functions.

most often to retain the soil moisture needed for riparian and wetland plants to thrive and riparian areas to not shrink and dehydrate (Fig. 3). This is critical to sage-grouse brood rearing and overall success in dryer parts of sage-grouse range (Atamian et al. 2010, Stiver et al. 2015), which is typical of where free-roaming horse herd areas are located. Also, with climate change these areas are generally getting dryer and/or more variable in their climate.

To function properly (Dickard et al 2015, Gonzalez and Smith 2020), riparian areas need more recovery than damage. Many strategies can help manage cattle grazing for riparian areas (Wyman et al 2006, Swanson et al. 2015):

- Short grazing and long recovery periods
- Occasional or planned growing season rest
- Riparian pasture management
- Moderate to light intensity
- Cool or early season use only or mostly
- Off-stream water access
- Regrowth before winter
- Varied grazing seasons year to year
- Riding, herding, & stockmanship
- Salt/supplement placement

Strategies that move animals are almost always necessary to avoid rangeland riparian degradation by livestock but these strategies are often not applied due to inadequate attention to monitoring needed to adjust management and to revise grazing management documents. Far too much hot season grazing is allowed or even required by out of date NEPA documents. To fix this problem this GSG EIS needs to empower and facilitate modification of livestock grazing strategies that reduce riparian damage and increase riparian recovery by creating a programmatic environmental assessment or impact statement that is site specific by linking analysis to common riparian sites or types.

Strategies that move animals are not allowed for free-roaming horses and burros. Horses must be maintained within their carrying capacity (AML) to prevent habitat destruction. Without effective predators, people must gather excess animals to prevent long-term habitat impairment or loss. (Fig. 4). NEPA documents that analyze, and records of decision that authorize, gathering to AML should have no time limit. When it is recognized that there becomes a need to go through the NEPA process for making a change a new NEPA process can be initiated. Until then, gathering to AML would simply need a documentation of NEPA adequacy.

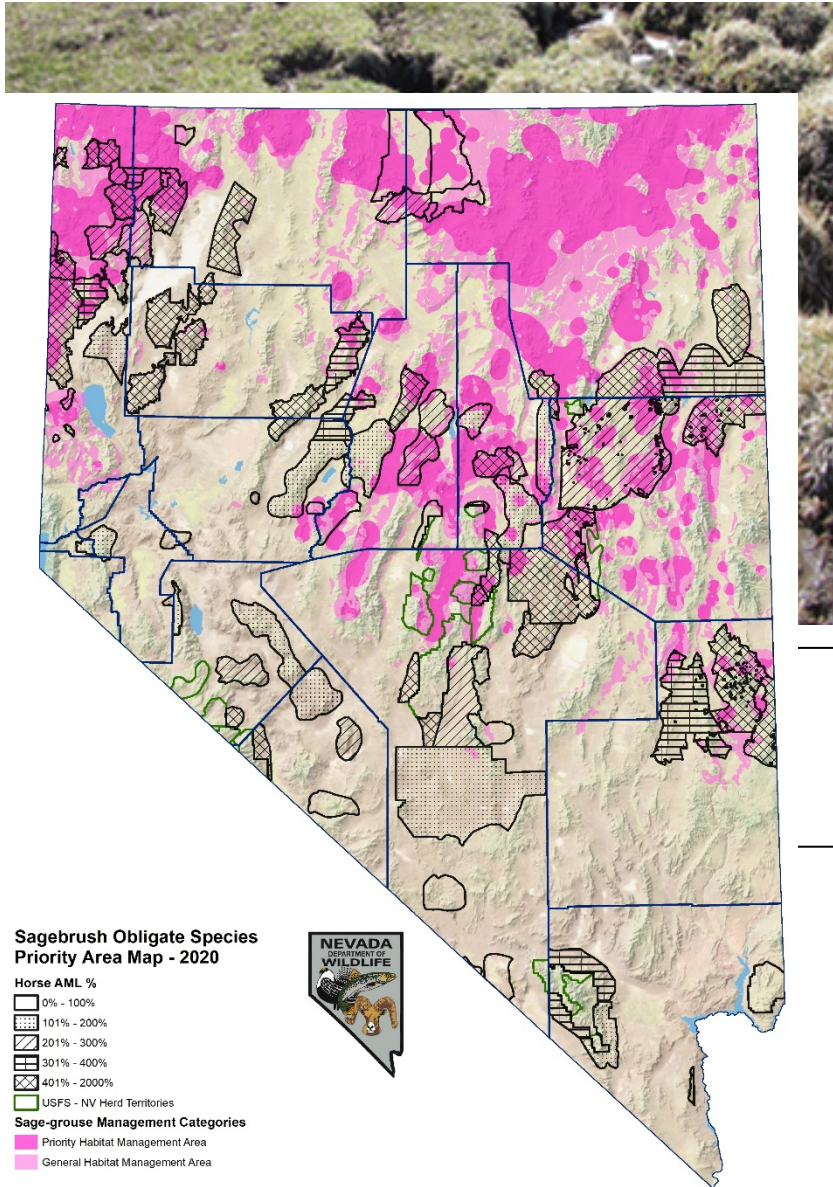


Figure 5. Nevada Department of Wildlife GIS based map overlaying herd management areas by % over appropriate management level in March 2021 and greater sage-grouse priority and general habitat (Espinosa 2021).

attracted to riparian areas and often doing season-long grazing, it is imperative that their populations be reduced to AML so that their level of use can allow riparian plants to maintain sufficient leaf area to grow and expand into bare areas. In any riparian areas that do not recover riparian functions and where horses have been managed below high AML for a period of several

Recent research on ten top tier (for GSG) late brood rearing lentic meadows in priority GSG habitat across Nevada in allotments and in herd management areas or FS WHB territories found that all ten studied lentic riparian areas were functional at risk (former meadows that were nonfunctional would not have been selected for this study). The combined use by horses and livestock was not allowing riparian vegetation to maintain riparian functions. By using time-lapse photography, it was determined that horse use (AUMs/Ha) in these meadows was twice the level of livestock use and almost twenty times the level of use by wild ruminants. Cattle used these riparian meadows 30 times more than other land in their allotments, horses used them 51 times more than other land in their HMAs or territories. Native big game use was incidental (Burdick et al. 2021). These meadows, the amount of bare ground along the wet transect where water flows, were even more sensitive to the duration of grazing than to the intensity of grazing. With horses

years and where livestock are systematically moved to allow sufficient riparian recovery time, an evaluation of high AML should be deemed appropriate.

Horses also degrade upland habitats by reducing shrub cover (Beever and Brussard 2000, Beever et al. 2008, Boyd et al. 2017) and availability of understory vegetation (Street 2020). Street (2020) demonstrated a direct negative effect of horses on grasses and forbs and a substantial negative effect of horses on survival of sage-grouse chicks during their first weeks of life. These effects on vegetation and sage-grouse demographic rates are sufficient to explain the negative effects of horses on population dynamics of sage-grouse but U.S.G.S. scientists have also shown that horses disrupt breeding activities on sage-grouse leks (Munoz et al. 2021). Thus a programmatic EA is need to enable modification of grazing strategies in upland ecological sites with strategies specific to states of ecological sites within a disturbance response group (similar to the approach used to facilitate target or prescriptive grazing for fine fuels management). Upland perennial plants in the sagebrush ecosystem must also be allowed to thrive and this too requires leaf area and proper stocking rates. When and where perennials are overgrazed, their ecological space gets taken up by much less palatable sagebrush and other shrubs. This increase in woody fuels eventually leads to fires and without a resilient understory, fire opened niches invite cheatgrass and other invasive plants to explode and then dominate in a cheatgrass fire cycle. Figure 5 shows the amount of overlap between herd management areas and the degree to which herd manage areas are above AML in important sage-grouse and other sensitive species habitat.

Given the state of the science, it is imperative that free-roaming horse populations be reduced to AML as rapidly as possible. Sage-grouse populations have declined since the USFWS declined to list them in 2015, and failure to bring horse populations to AML could influence listing decisions in the near future.

While some see horses as a way to manage fine fuels the opposite is true. Continuously grazing

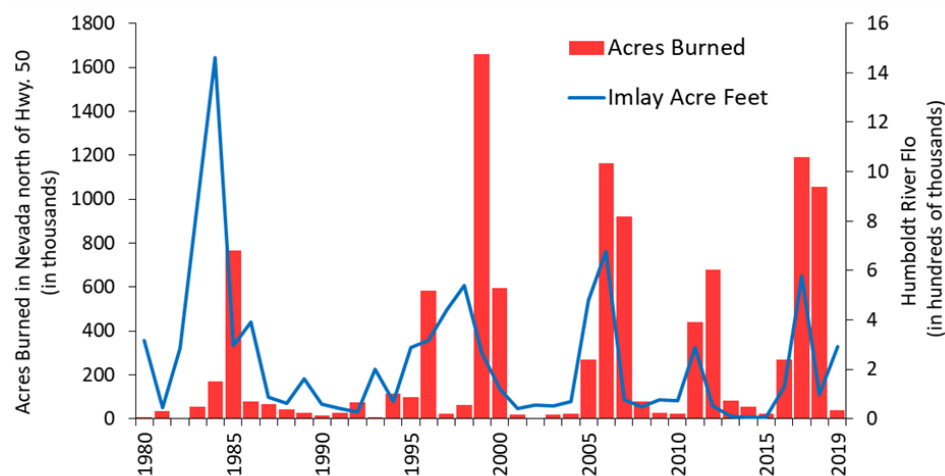


Figure 6. Depicts 1980 to 2019. Red bars reflect the number of acres burned in Nevada (north of Highway 50), and the blue line is based on U.S. Geological Survey annual flow data from the Imlay gage just above the Rye Patch Reservoir on the Humboldt River.

during the growing season stresses perennials in preferred grazing areas. This shifts the plant community to annuals. Annuals vary in their production among wet and dry years even more than perennials and fuels become especially excessive after wet years. Fig. 6 shows the years of the largest fires in northern Nevada, which clearly follow wet periods.

Across Nevada fire is the biggest threat to GSG and keeping ecological resilience is essential to manage this threat.

After the Wild and Free-roaming Horse and Burro Act, land management agencies had to develop their capacity to manage horse and burro populations. Suddenly a bureaucracy had to address what markets had previously motivated citizens to do. At first, the agencies had little data, limited staff, no infrastructure, laws that needed modification, and they continue to have many publics to serve (Symanski 1985). By 2007 they had nearly gotten populations back down to high AML -- 28,806 with gathers and adoptions (Fig. 1). But, this management was not sustained. With the Great Recession, adoptions diminished and off-range holding increased (Fig. 1). The expenses to care for off-range holding came to dominate agency budgets which horse advocates used as arguments to reduce gathering (Norris 2018, Garrott 2018). Lack of a vision, for a sustainable future then limited budgets (Norris 2018, Scasta 2018, 2019, Beever et al. 2018). Populations grew exponentially again, doubling twice in 12 years (Fig. 1).

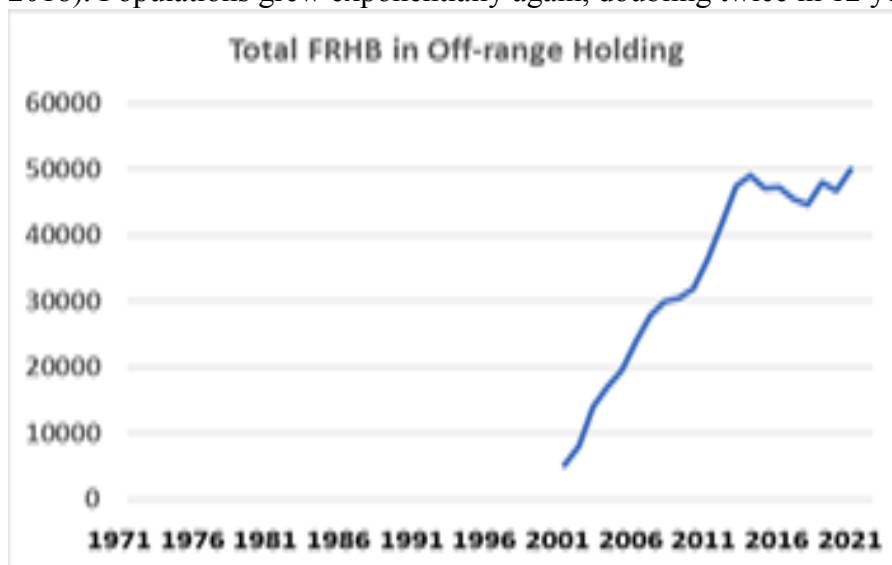


Figure 7. Horses in long-term off-range holding, mostly pastures ([BLM data from 1996 onward available at](#)

Given the current situation there is no alternative to gathering and placing horses in adoptive homes or long-term holding. Demographic modeling demonstrates that fertility treatments by themselves cannot reduce populations of horses, even when carefully implemented. Additionally, when fertility treatments are applied before herds are

at AML, treated horses must be regularly gathered to re-administer treatments, which takes resources away from efforts to remove horses from HMAs that exceed AML.

But there is hope that after getting to AML, fertility control, adoptions of horses and burros, adoption incentives if needed, the [comprehensive animal welfare program](#), and BLM Follow through on adoption contracts as needed, can work in tandem to make the Wild Horse and Burro Program sustainable. The sustainable approach must begin by getting to AML, that is, all herds consistently between low and high AM. Fertility control can be very effective at reducing the number of horses that must be gathered and adopted once populations are at AML.

Getting to AML quickly is the least cost, least ecologically damaging and most humane way to manage out of the current problem of high horse numbers growing exponentially and causing long-term damage to habitats and ecosystems. The longer it takes to reach AML the more horses

that will have to be gathered and moved to long-term holding at taxpayers' expense. While the cost is high initially, the reduced (perhaps to zero) number of horses needing to be added to long-term holding after AML soon reduces costs.

We have focused on the need to bring horse populations to AML to improve the health of wildlife populations, especially in Nevada. But that focus should not be construed as ignoring or minimizing the impacts of fire, energy development and mining, and mismanagement of livestock grazing on sage-grouse and other wildlife. BLM acknowledged that the majority of grazing allotments were not meeting rangeland health standards and many riparian areas were not in proper functioning condition in their 2015 sage-grouse conservation plan for Nevada. Street (2020) reported similar declines in understory vegetation and survival of sage-grouse chicks in response to livestock grazing as he found for free-roaming horses. While we do not support elimination of livestock grazing from federally managed lands, it is imperative that management of domestic livestock be improved on public lands, as inadequate management of grazing will undoubtedly contribute to sage-grouse population decline and the potential for listing sage-grouse in the future, an outcome that no one wants.

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Thank you for the opportunity to comment.

Respectfully,
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