



June 4, 2018

Leeann Murphy Acting District Ranger Humboldt-Toivabe National Forest Bridgeport Ranger District HC 62 Box 1000 Bridgeport CA 93517

Via email <comments-intermtn-humboldt-toivabe-bridgeport@fs.fed.us>

RE: Bridgeport Southwest Rangeland Project

Dear District Ranger:

These comments are submitted on behalf of Western Watersheds Project, the Center for Biological Diversity, and Wilderness Watch (collectively "conservation groups") regarding the Public Scoping Notice for the Bridgeport Southwest Rangeland Project which anticipates preparation of an environmental assessment (EA) addressing livestock grazing on the Cameron Canyon, Dunderberg, Summers Meadow, and Tamarack grazing allotments on lands within the Humboldt-Toivabe National Forest, Bridgeport Ranger District in Mono County, California. The conservation groups support the actions taken by the Forest Service to protect the Sierra Nevada bighorn sheep by canceling the domestic sheep permits on these allotments. These scoping comments address concerns regarding the impacts of the new proposal to issue cattle grazing permits on these allotments and alternatives that should be considered during this National Environmental Policy Act (NEPA) process.

Western Watersheds Project is a non-profit organization with more than 5,000 members and supporters. Our mission is to protect and restore western watersheds and wildlife through education, public policy initiatives and legal advocacy. Western Watersheds Project and its staff and members use and enjoy the public lands and their wildlife, cultural and natural resources for health, recreational, scientific, spiritual, educational, aesthetic, and other purposes.

The Center for Biological Diversity is a non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, Scoping Comments on Bridgeport Southwest Rangeland Project June 4, 2018

and environmental law. The Center has over 1.6 million members and online activists with over 63,000 members throughout California and the western United States. The Center and its members have worked to ensure the conservation of the Sierra Nevada bighorn including by seeking protections for this endangered species from the risk of disease transmission from domestic sheep grazing in its habitat. The Center and its members have also worked to ensure protection for other listed, rare, and special status species in this area that may be adversely affected by the proposal to allow cattle grazing on these allotments including Bi-State sage-grouse,¹ Sierra Nevada red fox, Yosemite toad, gray-headed pika (*Ochotona princeps schisticeps*), and rare plants.

Wilderness Watch is America's leading organization dedicated to defending and keeping wild the nation's 110 million-acre National Wilderness Preservation System. Our work is guided by the visionary 1964 Wilderness Act.

According to the Scoping Notice, the need for this action is to respond to an application to graze cattle on these allotments and the proposed action is to authorize cattle grazing after a ten-year period of inactive allotments within portions of the Dunderberg, Tamarack, Cameron Canyon, and Summers Meadow allotments and to stipulate the management actions, terms, and conditions under which cattle grazing would be permitted. The Notice states that an EA will be prepared, however, an EIS may be needed to fully consider all of the potential adverse impacts of this proposal. *See* 40 C.F.R. § 1508.27; 42 U.S.C. § 4332(2)(C). Whether an EA or EIS is prepared, as part of the NEPA process must also consider a range of alternatives that should include, but are not limited to: a no action alternative of not authorizing cattle grazing on these allotments; resting the allotments for at least a 10 year period before any new livestock grazing is considered in order to update baseline surveys for rare, sensitive, and listed species; greater protective measures for water resources and species habitat on these allotments; and further limiting the season of use and number of cattle per allotment.

Overall, the conservation groups do not believe that these allotments are appropriate for cattle grazing because this will have significant adverse impacts to species and habitats in this area. For example, needed fencing will adversely impact existing habitats and protected species; cattle grazing will directly reduce native forage available for wildlife and impact habitats; cattle grazing will adversely impact water resources, water quality and riparian areas; cattle grazing will spread invasive weed species; and cattle grazing will adversely impact recreational users.

Baseline Surveys for Listed, Rare and Special Status Species are Needed

These allotments provide habitat for a suite of listed, rare and special status

¹ The Bi-State sage grouse was proposed for listing in 2013. A recent court decision found that the later withdrawal of that proposed listing was unfounded. *Desert Survivors v. United States DOI*, 2018 U.S. Dist. LEXIS 81922, No. 16-cv-01165-JCS, (N.D. Cal. May 15, 2018) As a result, at this time, the Bi-State sage grouse should be considered as a species proposed for listing.

species. A set of initial maps are attached to these comment that show some of the locations of these important biological resources.

As part of the NEPA review the Forest Service must have up-to-date protocol level, seasonally appropriate survey information for all of these species. Our initial research shows that in addition to the Sierra Nevada bighorn sheep and Bi-State sagegrouse, other species in or near the allotments will require baseline surveys and status information include, but are not limited to:

species	Common name
Ovis canadensis	Sierra Nevada
sierrae	Bighorn Sheep
Centrocercus	Bi-State sage grouse
urophasianus	
Accipiter gentilis	northern goshawk
Anaxyrus canorus	Yosemite toad
Aplodontia rufa	Sierra Nevada
californica	mountain beaver
Boechera bodiensis	Bodie Hills rockcress
Boechera cobrensis	Masonic rockcress
Boechera tularensis	Tulare rockcress
Botrychium	upswept moonwort
ascendens	
Botrychium lineare	slender moonwort
Buteo swainsoni	Swainson's hawk
Carex tiogana	Tioga Pass sedge
Crepis runcinata	fiddleleaf hawksbeard
Gulo gulo	California wolverine
Hydroporus leechi	Leech's skyline
	diving beetle
Kobresia	seep kobresia
myosuroides	
Lepus townsendii	western white-tailed
townsendii	jackrabbit
Lupinus duranii	Mono Lake lupine
Ochotona princeps	gray-headed pika
schisticeps	
Ranunculus	frog's-bit buttercup
hydrocharoides	
Salix nivalis	snow willow
Setophaga petechia	yellow warbler
Streptanthus	Masonic Mountain
oliganthus	jewelflower
Vulpes vulpes necator	Sierra Nevada red fox

We also attach several maps showing critical habitats and species observations in this area (Attachments 1, 2, 3)--these are initial maps and not intended to limit inquiry into additional species that may need to be considered.

Sierra Nevada Bighorn Sheep

The Sierra Nevada bighorn sheep is both state and federally endangered. This area is within the Northern Recovery Unit for the Sierra Bighorn sheep, with Mount Gibbs, Mt. Warren, Green Creek, and Twin Lakes herd units. Bighorn sheep occupy the Mt. Gibbs and Mt. Warren units, but not year-round in the Green Creek and Twin Lakes units. California Department of Fish and Wildlife observed Sierra bighorn in the Green Creek herd unit in 2008. In 2008, critical habitat was designated, and although the Green Creek and Twin Lakes units are not included in this designation, these units contain suitable habitat and could be important areas for population expansion. Much of this suitable habitat is in the Hoover Wilderness, but suitable habitat is also found outside in the Humboldt-Toiyabe National Forest allotments.

The essential Mt. Warren Unit overlaps the Jordan Basin Unit and Dunderberg Allotments. This Sierra bighorn herd unit is considered essential for survival and recovery of the Sierra Nevada bighorn sheep as a whole (2007 Sierra Nevada Bighorn Sheep Recovery Plan, at 40).

California Department of Fish and Wildlife, in its February 15, 2017 letter to the Mono County Supervisors concerning sheep grazing on Conway and Mattly ranches, details observations of Sierra bighorn sheep in this region (2003-2016). Several sightings include the Jordan Basin Unit, the western edge of the Dunderberg Allotment, and the high crest of Monument Ridge inside the Cameron Canyon Allotment, and apparently towards Summers Meadow. Lundy Canyon just to the south of Jordan Basin is heavily used by Sierra Bighorn sheep.

The 2007 Sierra Nevada bighorn sheep Recovery Plan states that:

"...data on known bighorn sheep locations and predicted spring-summer and rut utilization areas indicate that bighorn sheep are likely to enter the Dunderberg, Tamarack, Cameron Canyon, Rickey (south), Green Creek (BLM), Dog Creek (BLM), Jordan Basin, Summer's Meadow, Horse Meadow, Alger's Lake, June Lake (west), and Bloody Canyon allotments at any time of the year, which greatly increases the risk of contact." (Recovery Plan at 65)

The Forest Service should analyze the potential for low-elevation winter range in the allotments, and how cattle grazing would impact this. The EA should consider whether more land in the allotments could be utilized as high-quality lower elevation winter habitat for bighorn sheep if populations expand. The EA also must consider the impacts of cattle utilization of forage on bighorn sheep winter range, both forage quantities left after a summer of cattle grazing, and nutritional quality. The Recovery Plan states:

A stable and functional ecosystem is of paramount concern. For Sierra Nevada bighorn sheep, a primary emphasis is continued access to suitable habitat. Habitat conditions within the range of Sierra Nevada bighorn sheep generally are not subject to obvious human-induced changes. What is primarily at stake for these animals is continuing, safe access to preferred habitats, notably winter ranges. Recent declines in population sizes have been linked to the decreased use of key resources on winter ranges. A basic premise of the recovery strategy, therefore, is to reduce factors that inhibit the ability of Sierra Nevada bighorn sheep to utilize all components of their habitat. (Recovery Plan at 36)

And:

Increased use of low elevation winter ranges will increase nutrient intake and thereby enhance reproductive output and success. Increased low elevation winter range use will also decrease mortality associated with the use of high elevations during severe winters. (Recovery Plan at 44)

If Sierra bighorn are potentially expanding northward in this area, reducing all livestock impacts could benefit recovery of these populations.

There is evidence of cattle displacement of newly re-introduced bighorn sheep, in an Idaho study of California bighorn sheep. Bisonette and Steinkamp (1996) found that bighorn sheep movement increased when cattle were moved closer. When cattle were moved to within 800m, bighorn left the area. Personnel associated with moving cattle may have played a role in bighorn sheep sensitivity, which raises the question of how trucking in cattle, building new developments, range riders, and other livestock management activities will impact bighorn sheep. The authors conclude that, "Avoidance has implications for reintroductions of bighorn sheep. The total area of potential habitat may not be used by sheep if livestock are present" (ibid.: 323).

There is literature on interference competition between bighorn sheep and cattle, social intolerance behavior (especially by ewes), competition for water sources (especially during drought years), carrying capacity of shared bighorn-cattle ranges, cattle straying farther into bighorn sheep ranges, and other bighorn-cattle interactions. This must also be analyzed in the EA.

Disease transmission from domestic sheep grazing is a significant threat to bighorn, and domestic cattle also have the potential to transmit disease from to Sierra Nevada Bighorn Sheep. The EA should include detailed mapping of Sierra bighorn critical habitat, herd units, and movement with respect to allotment boundaries, roads, proposed new fences, water developments, and any salt supplements.

The Sierra Bighorn Sheep Recovery Plan (2007), Appendix B, at 105 states:

The impacts of domestic cattle (*Bos taurus*) grazing within bighorn sheep habitat have not been well documented. Bighorn sheep may avoid areas where cattle are

grazed and not return to those areas for long periods after cattle are removed (King and Workman 1984). The potential for cross species transmission of diseases between cattle and wild ungulates may vary with local environmental conditions. Bovine viral diarrhea causes a complex of respiratory diseases, gastrointestinal diseases, and reproductive failure and may be transmitted between species. Hemorrhagic disease and pneumonia resulting from bluetongue virus (BTV) infection have been reported in bighorn sheep (Robinson et al 1967, Noon et al 2002). Because of prolonged viremia, cattle may be an important reservoir of BTV for Culicoides vectors (Osburn 2000) and, thus, a potential source of infection for other wild and domestic ungulates in areas climatically suitable for Culicoides. Singer et al (1997) studied cattle, bighorn sheep and mule deer (Odocoileus hemionus) in an area where the three species were known to utilize common areas. Only cattle were seropositive to BTV but deer and bighorn sheep were seropositive to *Babesia* sp. and *Psoroptes* mites were found only on bighorn sheep. Singer et al. (1997) concluded that cattle, deer, and bighorn sheep did not share similar patterns of exposure to the three pathogens and, thereby, proposed that cattle did not constitute a health risk for bighorn sheep in that area. Foreyt (1994) reported no adverse effects on healthy bighorn sheep in one co-pasturing study with domestic cattle. In a follow-up study, however, one of five bighorn sheep co-pastured with cattle developed a fatal pneumonia and died on day 6 post introduction (Foreyt and Lagerquist 1996). Although cattle may carry Pasteurella spp. that are pathogenic to bighorn sheep, those authors hypothesized that "the nose to nose contact required for transmission of P. haemolytica (renamed Mannheimia haemolytica) is less likely to occur between bighorn sheep and cattle" than with domestic sheep because the social interactive behavior between bighorn sheep and cattle is less likely to result in nose to nose contact. They recommended that further studies be conducted to determine the compatibility of bighorn sheep and domestic cattle. Based on the limited information currently available, there is insufficient evidence to exclude cattle grazing in or near bighorn sheep habitat based on disease considerations. However, if cattle grazing increases in proximity to bighorn sheep, disease considerations should be reconsidered. (Emphasis ours)

It is precisely this increase of cattle grazing in proximity to Sierra Nevada bighorn sheep populations in the Northern Recovery Unit that we are concerned with. Cattle can transmit Bovine Respiratory Syncytial Virus and bronchopneumonia to bighorn sheep (Spraker et al. 1986, Wolfe et al. 2010). Wehausen (1986) discussed other non-native pathogens possibly transmitted from cattle to desert bighorn sheep, including epizootic hemorrhagic disease, blue tongue (commonly carried by cattle), and parainfluenza-3, which have all been implicated in the suppression of lamb recruitment. These may have been vectored by gnats. More research is needed. Wehausen (ibid., 22-23) stated that removal of the possible disease reservoirs in domestic cattle could relieve the local desert bighorn population from a significant stressor that "might produce a significant change in the demography of the bighorn population."

The Forest Service should require annual testing of any cattle before they are

allowed in these allotments for these and other diseases that could potentially spread to bighorn. Vaccinations of cattle are apparently not viable, but this should be discussed in any environmental review. A No Livestock Alternative should also be explored.

Bi-State Population of Greater Sage-grouse

Bi-State sage-grouse in this area are managed in the Bodie Population Management Unit (PMU). According to the Scoping Notice the project area provides nesting habitat for bi-state greater sage-grouse and lies within 4-mile lek buffer zones. Although there are no known leks in the project area, this habitat could be utilized as the species recovers. Before allowing cattle to graze this area, the Forest should do detailed surveys for sage-grouse, any new lek, nesting areas, early brood rearing areas, and other habitat use. Any Allotment Management Plan must reduce or eliminate grazing during these and any other seasonal periods of critical importance to this species.

During our visit in May 2018, we saw large areas of the Jordan Basin, Dunderberg, Cameron Canyon, and parts of the Summers Meadow Allotments that appeared to be excellent habitat for sage-grouse. Both winter and summer habitat was present, with dense sagebrush and bitterbrush. Brood-rearing habitat on shrub-meadow edges appeared to be of high quality and recovering from past sheep grazing. We found native bunchgrasses, rhizomatous meadow grasses, and forbs were growing well in this ungrazed condition.

Thines et al. (2004) found that cattle grazing reduced the nutritional quality (e.g., increased fiber and decreased protein) of the remaining grass. This depletion of native bunchgrasses not only alters the nutritional composition of native bunchgrasses, it also reduces the protective screening cover of native bunchgrasses critical to conceal sage-grouse nests. Sage-grouse also use herbaceous understory plants as forage.

The herbaceous understory of sagebrush shrub communities may be severely altered with cattle grazing: 45% utilization of herbaceous species in Functioning upland sagebrush and mountain brush sites may not provide requisite cover for sage-grouse. For example, 45% utilization of needlegrass (*Stipa* spp.) may only leave 2.5 inches of stubble height remaining, and 45% utilization of squrreltailgrass (*Elymus elymoides*) may only leave 1 inch of stubble height. This is not enough to provide cover for sage-grouse, especially nesting cover. Bitterbrush is often selected as a nest shrub in the Bodie PMU (NDOW 2004). Great Basin wild rye (*Elymus cinereus*) contributes notably to tall, dense grass cover. The EA must consider these large native bunchgrasses can be proptected from heavy grazing. We saw tall stands of Great Basin wildrye in meadows above Sinnamon Meadow within the Dunderberg Allotment, in Jordan Basin, and along Cameron Creek.

Nest site evaluations in the Bodie PMU find forbs such as milkvetch (*Astragalus* sp.,), hawksbeard (*Crepis* sp.), phlox (*Phlox* sp.), groundsmoke (*Gayophytum* sp., scattered to common) and yarrow (*Achillea millifolium*). We saw all these species with the exception of groundsmoke on the allotments—the EA must consider how the Forest

can ensure these forbs remain plentiful enough to provide nesting and foraging habitat in future. Abundant forbs are an important source of nutrition for pre-laying hens and hens with broods (Connelly et al. 2000). June hatching dates have been documented in the Bodie PMU and some potential for nest disturbance and trampling does exist for late season nesters (NDOW 2004). The EA must consider how these and other impacts to sage grouse habitat can be avoided or mitigated.

Summer habitat for sage-grouse in the Bodie PMU is at higher elevations, and sage-grouse often cluster around meadows, springs, and streams. The EA must consider how these areas can be protected from heavy grazing. Due to their limited extent and susceptibility to livestock grazing induced ecological changes, the availability of quality meadow and riparian habitats may be a significant limiting factor for sage-grouse in the PMU (NDOW 2004).

Winter habitat commonly includes lower elevation stands of dense sagebrush. The EA must analyze how fragmentation of these stands by cattle and fencing will impact sage grouse habitat and recovery as well. Alternatives must be considered that would prevent or mitigate such impacts.

Water projects also expand livestock use into less impacted sagebrush habitats, and expand livestock depletion. The EA must disclose if there will be salting, and feeding of nutrients and supplements on the allotments. These activities can further create disturbed areas where weeds invade, shrub structure is altered, and the ground is trampled. The EA must disclose whether water hauling occur as these and other activities can further fragment the dense sagebrush habitats we found in this area, and have the potential to create disturbed ground where cheatgrass can expand to.

The proposed 22 miles of new fencing can impact sage-grouse by providing more perches for predatory birds, as well as increase collision hazards with artificial structures. These impacts in addition to the impacts of existing fencing must be analyzed. Alternatives that would eliminate grazing and remove all fencing should be considered and the long-term conservation benefits assessed.

The EA must also consider how cattle may impact the lek in Lower Summers Meadow, one of the few in the PMU west of US Route 395, and how impacts may occur from cattle grazing in such close proximity including fencing infrastructure and increased human activity. The EA should describe the history of this area and whether this lek is currently within an allotment and proposed to be excluded by allotment acreage reduction and boundary modification.

For example, NDOW (2004) recommends 1) Maintenance or improvement of sagebrush communities in known breeding areas; 2) Improvement of meadow and riparian habitats; 3) Eliminating or substantially reducing trailing disturbance in breeding habitats in the western portion of the PMU; 4) Proper design, location and development of livestock management facilities; 5) Reducing impacts associated with drought conditions; and 6) Developing management strategies and incentives that encourage the

long-term maintenance and improvement of private rangelands in the PMU. The EA must consider how and whether the Forest can accomplish these and similar goals for the protection of sage grouse habitat if it permits cattle grazing to occur on these allotments.

Other Species of High Concern Need Updated Baseline Surveys

Baseline protocol-level surveys of all potential habitat of the Federally Endangered Sierra Nevada yellow-legged frog (*Rana sierrae*) and Federally Threatened Yosemite toad (*Anaxyrus canorus*) in the project area are required. All meadows, seeps, springs, lakes, ephemeral pools, and streams above 3,500 feet elevation should be surveyed thoroughly for these amphibians during the appropriate months. We found one ephemeral snow-melt pool on the southeast edge of the main Dunderberg Allotment.

Critical habitat for Yosemite toad is adjacent to and overlaps parts of the allotments. The EA must disclose and map this and other habitat designations and analyze impacts of cattle grazing to this species and its critical habitat.

Livestock grazing could significantly impact moist meadow habitat quality for Yosemite toads, as well as impact water quality in water bodies that could hold potential Sierra Nevada yellow-legged frog populations. These impacts must be analyzed.

Wolverine should also be analyzed, as there are 6 unverified observations in the Bridgeport Ranger District according to the California Natural Diversity Database, and no extensive surveys have been undertaken in the area. The Hoover Wilderness contains 56% of the 2,600 acres of potential wolverine habitat in the District according to the 2010 Final Environmental Impact Statement for the Bridgeport Travel Management Plan, at 93.

A thorough literature search regarding known stressors and the potential for grazing to impact these species will be required as well. For example, the gray-headed pika (a subspecies of American pika) has been observed on these allotments (*see* Attachment 3). The American pika is a small mammal related to rabbits and hares that inhabits high elevation talus fields in alpine and subalpine areas. Pikas are extremely temperature-sensitive and are restricted to cool, moist microhabitats on higher peaks. In the northern part of its range, the pika is found at elevations from near sea level to 3,000 meters (Smith and Weston 1990). To the south the lower elevational limit of its range becomes progressively higher as American pikas cannot tolerate the high temperatures found at lower elevations (Smith and Weston, 1990). Therefore, near the southern limits of its distributional range, American pikas are rarely found at elevations lower than 2,500 meters (Smith and Weston 1990).

A study from Millar (2011) indicates grazing can have several impacts on this species by reducing available forage for happiles in forefields:

Lack of abundant, diverse, and nutritional forage for direct and stored consumption might lower overall fitness of pikas. Similarly, lack of adequate forefield vegetation appears to force pikas to move high in the talus to find alternative food, exposing them to potentially less favorable thermal conditions in summer as well as in winter.

For gray-headed pika, the environmental review must consider how grazing would affect available forage and how reduced access to forage could impact pikas directly, indirectly, and cumulatively. Similar analyses would also be needed for each of the listed, rare and special status species found on or near these allotments. Given these significant impacts to a large number of listed, rare and special status species, the conservation groups believe a full EIS will be needed.

Yellow warbler (also a Management Indicator Species) needs analysis. We saw and heard a singing yellow warbler in the recovering willow riparian community along Dunderberg Creek on May 24, 2018, in the Dunderberg Allotment. Cattle grazing can degrade willows by browsing and removing understory. For riparian birds such as yellow warbler and willow flycatcher, the Forest Service must consider fence off healthy sections of riparian along streams to protect this habitat from cattle and must also consider the impacts of that additional fencing. Yellow warblers should be monitored with respect to distribution in the allotments, population, and riparian habitat, to gauge the health of riparian communities.

Sierra red fox is a candidate species for listing under the Endangered Species Act. This fox has a widespread habitat use, including sagebrush shrublands, forests, meadows, and fell fields. They use alpine and subalpine habitats in summer, and may migrate to mid-elevation habitats in winter. Use of patchy whitebark pine and lodgepole pine habitats is documented, and this type of habitat is fairly common on the allotments. Grazing and developments threaten this rare species.² The Sonora Pass sighting area includes several multi-year Sierra Nevada red fox residents on lands that are owned and managed by Humboldt-Toiyabe National Forest, Stanislaus National Forest, and Yosemite National Park.³ This population area is posited to include mountains south into the northern portion of Yosemite National Park. The entire area has been poorly surveyed for Sierra Nevada red fox due to rough terrain. How would cattle grazing, water developments, and impacts to meadows and forests affect potential Sierra red fox?

Many rare and sensitive plant species may occur within the boundaries of these allotments—please analyze these species with respect to their presence and impacts cattle grazing could have on them. Botanists should carry out surveys for rare plants on the ground.

Other Terrestrial Wildlife Must be Considered

The EA must also analyze impacts of cattle grazing to other wildlife found in this area including those listed above and the following: flammulated owl (*Psiloscops*

² http://www.biologicaldiversity.org/species/mammals/Sierra_Nevada_red_fox/index.html

³ https://s3.amazonaws.com/public-inspection.federalregister.gov/2015-25289.pdf

flameolus), great gray owl (*Strix nebulosa*), bald eagle (*Haliaeetus leucocephalus*), willow flycatcher (*Empidonax traillii*), mountain quail (*Oreortyx pictus*), American marten (*Martes americana*), Pacific fisher (*Martes pennanti*), pygmy rabbit (*Brachylagus idahoensis*), Townsend's western big-eared bat (*Plecotus townsendii ssp. pallescens*), and spotted bat (*Euderma maculata*).

Healthy stands of subalpine forest and pinyon-juniper woodland consisting of lodgepole pine (*Pinus contorta* ssp. *murrayana*), whitebark pine (*Pinus albicaulis*), Western white pine (*Pinus monticola*), Jeffrey pine (*Pinus jeffreyi*), singleleaf pinyon pine (*Pinus monophylla*), Sierra juniper (*Juniperus occidentalis*), Utah juniper (*Juniperus osteosperma*), and aspen (*Populus tremuloides*) occur throughout the allotments that could provide habitat for flammulated owl, great gray owl, Northern goshawk, and American marten. Are there high quality nesting sites in aspen stands within the allotments for Northern goshawk? We observed many large, healthy stands of aspen.

Mountain quail is a US Fish and Wildlife Service species of concern. The success of the mountain quail is tied to sufficient habitat, including shrub and riparian habitats, as well as sufficient water sources during the summer. Human-caused changes in plant composition have impacted the mountain quail as much as anything. Large population declines have occurred in eastern Oregon due to livestock grazing, exclusion of fire, weed invasion, and water extraction.⁴ Riparian habitats have been lost, fragmented, or altered. How will habitats for mountain quail be maintained with cattle grazing and associated developments? On May 24, 2018, we heard the calls of a mountain quail in the Jordan Basin Unit.

Great gray owls potentially occur in large tracts of coniferous forests often adjacent to meadows in the area. Are great gray owl nesting sites known from the allotments, and how close are any Protected Activity Centers? This should be analyzed.

Bald eagles are found in the Green Creek Wildlife Area, and have been observed in Lundy Canyon. They winter on Twin Lakes and have potentially nested there. Are there lakes or streams within the allotments that may be potential foraging areas for bald eagles? What impacts will cattle have on potential nest sites?

Willow flycatchers breed in shrubby riparian thickets with complex vegetation structure, and often water under the riparian vegetation. Green Creek has historic nesting records. Please map potential habitat for this species, and analyze how cattle grazing could impact riparian areas. Cattle tend to remove lower vegetation, create browse-lines, and simplify vegetation structure, thereby reducing nesting habitat for willow flycatchers.

Forests with complex vegetative structure near the ground, such as shrubs and grasses, debris piles, and downed woody material, are important winter habitat for American marten (Buskirk et al. 1994). Cattle tend to browse, trample, rub, and break shrubs, forbs and grasses in conifer forests, simplifying the structure, in our observations.

⁴ https://www.fws.gov/oregonfwo/Species/Data/MountainQuail/

Please analyze this impact to forests in the allotment that could be potential habitat for martens.

Pacific fisher, although rare and very difficult to observe, should be included in analysis. In 2014 the US Fish and Wildlife Service proposed listing of the West Coast DPS of fisher as threatened in accordance with sections 3(6) and 4(a)(1) of the Endangered Species Act. In 2016 the listing was denied by USFWS as long as "voluntary conservation measures" could increase habitat for the fisher. Potential habitat is found in the allotments we believe—large patches of continuous coniferous forest adjacent and within the Hoover Wilderness Area, but possibly elsewhere. Laura Cunningham (pers. observation field notes) observed a fisher in extensive pinyon-juniper woodlands on the Glass Mountains, Mono County, in the Inyo National Forest in 2017. Will cattle grazing impact potential fisher habitat on these Mono County eastern Sierra forested allotments?

Pygmy rabbit has been petitioned for listing in the past. It requires dense sagebrush communities. How will livestock potentially reduce sagebrush, trample burrows, reduce bunchgrass pygmy rabbit forage, and fragment pygmy rabbit habitats that may be present in the allotments? See for example, Thines et al. (2004). Pygmy rabbit surveys and monitoring should be included in the proposed project.

Spotted bats are vulnerable to habitat alteration, including loss or reduction in value of wet meadows and other foraging areas. Such impacts could result from overgrazing by livestock, water diversion, or changes in land use (Luce et al. 2007). How will cattle grazing be managed to avoid these impacts?

Townsend's western big-eared bat is currently unprotected. It is a former category 2 candidate for federal listing as threatened and endangered, and is highly sensitive to disturbance of roosts. Will proposed water developments disturb roosts of this species?

Impacts to Management Indicator Species Should Be Considered

While the current list of MIS species is quite small. There are several MIS and former MIS species that should be considered in this environmental review because they may show population changes that result from habitat changes caused by the management decision to allow cattle into these allotments, which have been recovering from livestock grazing since 2009.

For example, several cavity-nesting birds, including hairy woodpecker (*Picoides villosus*) and Williamson's sapsucker (*Sphyrapicus thyroideus*), occupy lodgepole pine, Jeffrey pine, and aspen groves, and the hairy woodpecker is a Forest Service Management Indicator Species.

On May 24, 2018, we heard calls of a hairy woodpecker in the Jordan Basin Unit. How will cattle grazing impact these species? Hairy woodpeckers should be an indicator of snags in green forests—what are the impacts of cattle to snags? American marten (*Martes americana*) is currently an indicator of the health of Late Seral Closed Canopy Coniferous forests, which may be present in the allotments. What will the impacts of cattle be on this habitat?

Yellow-rumped warbler (*Setophaga coronata*) were formerly considered a Forest Service Management Indicator Species, found in subalpine conifer and pinyon-juniper woodlands, as well as riparian groves. They have been confirmed to breed along Green Creek. The Forest Service must consider how cattle grazing will impact this species along with other riparian species and resources.

We saw abundant sign of mule deer (*Odocoileus hemionus*) in the Jordan Basin Unit, utilizing abundant growth of bitterbrush shrubs (*Purshia tridentata*). This important winter and migration forage for mule deer could be browsed and trampled by cattle—the environmental review must consider the impacts to this deer herd. On My 24, 2018, we saw a group of 8 mule deer, including does and a few bucks with antlers beginning to grow, in upland montane chaparral on the south end of the Dunderberg Allotment. Migratory corridors exist in places in this region, including Green Creek and must be protected. The EA must delineate any migratory corridors, summer habitat, and winter habitat, within the allotments. The EA must also thoroughly analyze how mule deer population trends may be impacted by cattle newly introduced into their range.

Other Management Indicator Species have been previously discussed, above.

Fisheries

Cameron Creek, Summers Creek, and Dunderberg Creek appear to be excellent habitat for trout and could potentially be recovery habitat for future native trout populations. Streams are recovering nicely from sheep grazing, with deeper channels, riparian vegetation increasing, and overhanging plants. In addition, important native trout habitat in the Walker Basin could be impacted by erosion and increased sedimentation, riparian habitat removal, and decreased water quality downstream from cattle grazing in the allotments. The EA must consider these water quality impacts and if there are any potential impacts to Lahontan cutthroat trout (*Oncorhynchus clarki henshawi*), a Federally Threatened species, in the Walker River basin.

Further Adjustments to the Allotment Boundaries Must be Considered.

We commend the Forest Service for proposing to reduce the allotment sizes, from approximately 22,926 acres to 18,030 acres, however, further reductions should be considered as well because of potential significant impacts to Sierra Nevada bighorn sheep, B-State sage-grouse, and other species.

Impacts to Adjacent Lands Must be Considered

Impacts to adjacent lands from new fencing, the spread of invasive weeds, impacts to water resources and water quality must all be fully considered in the EA.

In the EA, better maps should be provided to the public that show Wilderness Area boundaries, roads, proposed fences, and exact locations (showing latitude-longitude or Universal Transverse Mercator coordinates) of new water developments, and springs and streams. Other designated lands should be included in allotment maps, such as the Green Creek Wildlife Area owned by California Department of Fish and Wildlife. The Summers Meadow Unit of this state Wildlife Area is adjacent to the Summers Meadow Allotment on Forest land, and impacts of cattle grazing to this land unit need to be analyzed.⁵

The EA also needs to consider the impacts of cattle herds and grazing, fencing, and water developments be on adjacent lands and easements conserved by the Eastern Sierra Land Trust, such as at Sinnamon Meadows.

Impacts of Existing and New Fencing Must be Considered

Twenty-two new miles of new fencing are proposed for the allotments. The Scoping Notices says that where possible, the amount of new pasture boundary fences needed would be reduced by taking advantage of topographic features or other natural barriers. The Forest Service also says that the permittee may employ herding as a substitute for fencing in some cases.

Fencing can have significant impacts to wildlife by, for example, fragmenting habitat and by providing perching opportunities for predators. Existing fencing should be reduced or eliminated in Bi-State sage grouse habitat including occupied and recovery habitat and no new fencing should be allowed in these areas.

Existing and proposed fencing should be mapped in detail in the EA. A comprehensive fencing inventory of existing fencing should be included. In a recent visit to these allotments, we found many confusing fence-lines on the edges of and within allotment boundaries. A non-live hot-wire was strung apparently on the edge of the Dunderberg Allotment that separated it from lands managed by the Eastern Sierra Land Trust in Sinnamon Meadow. Other hotwires (not live) were found in meadows near Dunderberg Creek. Are these past historic fences? Will they be removed, left in place, or repaired and used for cattle pasture management? We recommend all non-essential fences be taken down to protect sage-grouse and other species.

We are concerned that the proposal to use natural topography to contain cattle instead of fencing would not adequately protect adjacent lands. On visiting these allotments, such as Jordan Basin and Dunderberg, we found many of the topographic barriers are low ridges covered with sagebrush, bitterbrush, and native upland grass and forb species—these do not create a barrier to cattle. It appears cattle could easily disperse over these ridgelines and access lands managed by Bureau of Land Management and the State of California, at Green Creek Wildlife Area. In addition, how would cattle be kept

⁵ https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=87806&inline

out of other areas of Hoover Wilderness, and even Yosemite National Park? Some slopes towards the west are steep and rocky, but gaps could allow cattle access to more of the Wilderness.

In addition, no fence-lines are proposed to separate the Jordan Basin Unit from Lundy Canyon to the south, a concern in that cattle could spill over into a core area used by Sierra Nevada bighorn sheep.

Yet as noted above, building more fences is also problematic because fences could hinder Sierra bighorn sheep movements in the area as well as other wildlife, and be a cause of mortality to bi-state sage-grouse and bighorn sheep. Wehausen (1986 at 25) observed cattle barbwire fencing in the California desert to impact desert bighorn sheep: "...bighorn appear generally incapable of negotiating standard livestock fencing (Wehuasen, unpubl. Observations), and have been documented to die in such fences due to entanglement (Russi, pers. Comm.)."

The EA must also fully consider whether new roads would be created along new fence-lines during and after construction and the impacts of those roads to native plants and habitats.

Using range riders to contain cattle is also problematic to causing potential disturbance to Sierra bighorn sheep, sage-grouse and other wildlife.

All of these issues must be fully considered in the EA and the conservation groups believe that a fair assessment will show that the impacts of the infrastructure needed to contain cattle grazing on these allotments will be significant. As such, an EIS may be needed for this proposal.

Impacts to Water Resources and Water Quality Must be Fully Considered

The Forest Service must consider exclusion of grazing from all springs, seeps, wet meadows and other wetlands and buffers in all these allotments. These water resources and riparian areas provide a myriad of important values to both wildlife and people. Water resources are particularly attractive to cattle and suffer proportionally greater impacts from cattle grazing. Based on this, exclusion of grazing from all water resources including riparian areas, wet montane meadows, springs, and wetland buffer areas should be considered in each alternative in the NEPA documents for all of these allotments.

Cattle accessing springs, creeks and riparian areas are known to impact water quality as well as the bed and banks leading to increased potential for erosion, headcutting, and streambank alterations leading the increased siltation and bacterial water pollution as well.

Microbial and nutrient pollution by livestock grazing on public lands degrades water quality, threatening human and ecological health. Some of the contaminants of concern include fecal indicator bacteria (FIB), fecal coliform (FC) and *Escherichia*

coli (*E. coli*), as well as nitrogen (N) and phosphorus (P). FIB are regulated in an attempt to safeguard public health from waterborne pathogens such as *Cryptosporidium parvum* and *E. coli* and human enteroviruses including adenoviruses and coliphages. Indeed, a portion of the East Walker River and/or its tributaries qualify or are already listed as impaired under the Clean Water Act (303(d)) and further pollution is not consistent with the Clean Water Act. Concerns about elevated N and P concentrations in surface water stem from the potential for eutrophication of aquatic systems.

Cattle may preferentially use key grazing areas that are often relatively small, stream-associated meadows and riparian areas that are preferentially grazed by cattle due to high forage quantity and quality and drinking water availability. The Forest must provide baseline data on water quality and, if cattle grazing is permitted, require frequent monitoring to measure water quality in these areas, protect water quality, and prevent eutrophication of streams. *E. coli* are indicators of fecal contamination and therefore can provide accurate assessment of water quality conditions and human health risks.

In addition, aquatic macroinvertebrate metrics must be sampled to provide baseline data and, if cattle grazing is permitted, to monitor stream water quality and watershed conditions.

Recent observations show that the meadows, grasslands, streambanks, and hill slopes are recovering well from past sheep grazing impacts—the Forest Service should consider allowing that process to continue rather than allow new impacts to these fragile and irreplaceable resources from new cattle grazing on these allotments.

Impacts of Water Developments Must be Considered

The EA must consider how water developments impact streams, stream flow, riparian vegetation, and wildlife use as well as how cattle will impact water quality. Please include detailed maps of where water developments will be placed, and what kind of pipes, wells, spring development, and water troughs or ponds will be constructed.

Additional issues that must be considered are whether improved water developments and water troughs will attract other wildlife including attracting Sierra bighorn sheep to drink at artificial water developments. Wildlife-friendly ramps must be installed for the troughs to allow escape of small mammals, quail, etc. If any artificial ponds are being considered, will any earthen dams be constructed?

How will the water development be built in the Jordan Basin Unit? Will a spring be tapped and piped to a trough? Will aspen groves be disturbed?

Archaeology surveys will need to be performed before any construction activities as well.

Season of Use

As part of the range of alternatives, the Forest Service should consider different and shorter seasons of use for these allotments to protect the resources on these allotments. For example, the Jordan Basin Unit, being higher elevation than many of the other allotments will likely have snowmelt and mud conditions during most years well into the summer. The EA should consider not allowing grazing to commence on this allotment until July at the earliest, in order to reduce impacts on native vegetation, soils and water resources. And, because this allotment Unit is quite close to the Lundy Canyon Sierra bighorn sheep core area, the alternatives should consider cancelation of all classes of livestock grazing on this unit.

Grazing Management Strategies

A simple deferred or rest rotation system is proposed but the notice does not explain if new fences be built within allotments in order to rotate stock into different pastures. Or, if herding is used, will permittees use only horses or would they also potentially use motorized vehicles such as OHVs or quads? If pastures are rested, will the grazed pastures have light stocking rates? All of these questions regarding the grazing proposal need to be more fully disclosed in the EA and the impacts fully analyzed.

Monitoring

The Forest Service is seeking the ability to adjust grazing use and strategies to meet variable forage and resource conditions within the confines of the permit terms and conditions. The proposed action includes parameters to be used by the Forest Service and the permittee to measure and assess the effectiveness of grazing management toward maintaining or achieving desired conditions. The EA must disclose how this will be monitored with such small resources available over so large an area and provide a process and time frames for making decisions to adapt management that will be quick enough to protect the resources.

If cattle grazing is permitted, the Scoping Notice explains that monitoring would initially be completed yearly, though it may be less frequent once the Bridgeport Ranger District was satisfied that the permit terms and conditions were being implemented, that proper-use criteria were being met, and that the project area was maintaining or progressing toward desired conditions. The Notice states that if each pasture cannot be monitored for range readiness before grazing is initiated, that determination may be made based on the results of monitoring similar vegetation at similar elevation elsewhere in the area. Alternatives to this process must be considered because relying on monitoring in other areas may be inadequate to show the condition of these allotments due to varying local rainfall patterns—proxies should not be used to monitor these high-resource value allotments. The EA should consider at least one alternatives that would require the allotment to remain closed in any year that site-specific monitoring data is not available.

The EA should also explain how Management Indicator Species will be utilized for monitoring of sagebrush-steppe, forests, riparian areas, aspen groves, water quality, erosion, impacts to native wildlife and fish, and invasive/noxious weeds. The Allotment Management Plans (AMPs) for this area must include requirements that the trend towards improving ecological conditions are maintained. In addition, the specific riparian standards must ensure healthy willow and streambank conditions are maintained and not degraded.

The AMP plans should include monitoring of ground cover, invasive species, aspen, species composition, water quality, and soil productivity.

The abundance and distribution of aspen should be monitored as it may change over time. The abundance and distribution of invasive cheatgrass must be monitored with both percent cover and acres monitored. And clear triggers should be put in place to suspend grazing if invasive weeds such as cheatgrass increase on these allotments.

A long-term effectiveness monitoring plan should be designed for the AMPs, such as setting up repeat-photography sites, transects, or permanent plots for monitoring that can be used to consider vegetation trends at minimum every five years.

Proper-Use Criteria

The Scoping notice indicates that utilization rates of 45% in herbaceous upland sagebrush and mountain shrub, but this is too high to protect other resources. The EA must consider rates under 35% or less as directed by the Bi-State Sage-grouse forest plan amendment. See discussion for Bi-State sage-grouse.

Does 40% of sagebrush, aspen, and bitterbrush adequately take into account potential wintering bighorn sheep and mule deer herd shared utilization?

Utilization of willow riparian of 20% is also too high, as cattle tend to concentrate along creeks and over-utilize willows. Will the willow riparian areas that are recovering from grazing, as along Dunderberg Creek and Cameron Creek, be fenced in an exclosure to protect them from browse-lines and breakage, to allow for increased habitat for yellow warbler and other riparian species? If so, the impacts of fencing must also be considered, and without fencing how would limits on forage utilization in these areas be realistically maintained. The understory of gooseberry, meadow grasses and forbs we recovering well under riparian aspen groves along Cameron Creek, and we saw a pair of sooty grouse fly up from the dense streamside understory. Fencing off these riparian areas from cattle grazing could greatly improve resource values. But more fencing will also be a hazard for sage-grouse and other wildlife.

We found several meadows in the Dunderberg Allotment to be somewhat degraded, yet recovering from past sheep grazing. Native grass and graminoid species were present, but some cheatgrass and bare soil was also in evidence. In the Cameron Canyon Allotment, along Cameron and Summers Creeks, meadows had infestations of weedy *Poa bulbosa*, and may be at risk. Upper Summers Meadow in the Summers Meadow Allotment was full of weedy dandelion and barely above Non-Functioning in many places in our opinion. This meadow should be rested from all grazing to allow for further recovery.

The EA must also disclose monitoring and enforcement of utilization limits would be accomplished. Will exclosures of some areas be used to monitor utilization levels in all these habitats? If so, the impacts of that additional fencing and habitat fragmentation must be fully analyzed.

Soils and Watershed

As noted above, there is potential for increased erosion, headcutting, and increases streambank alterations in several sites in the allotments. The meadows, grasslands, streambanks, and hill slopes are recovering well from past sheep grazing impacts—the Forest Service should ensure that this trend continues to protect these critical resources. Any impacts under a cattle grazing plan must be fully disclosed and analyzed, impacts should be avoided, minimized and mitigated.

In addition, any changes in native plant cover and surface organic matter (litter) must be measured and monitored, to ensure soil and watershed health overall.

Vegetation

Many rare and special status plants are found on these allotments. As noted above, seasonally appropriate, protocol level, baseline surveys should be done regarding all of these species. Impacts to these native plant species are of great concern and must be fully analyzed in the environmental review.

Whiteback pine (*Pinus albicaulis*) is proposed for listing under the Endangered Species Act. The US Fish and Wildlife Service 2016 review of Candidate species stated:

Models predict that suitable habitat for whitebark pine will decline precipitously within the next 100 years. Past and ongoing fire suppression is also negatively affecting populations of whitebark pine through direct habitat loss. Additionally, environmental changes resulting from changing climatic conditions are acting alone and in combination with the effects of fire suppression to increase the frequency and severity of wildfires. Lastly, the existing regulatory mechanisms are not addressing the threats presented above. ... Survival and reproduction of genetically resistant trees are critical to the persistence of the species given the imminent, ubiquitous presence of white pine blister rust on the landscape. Overall, the threats to the species are ongoing, and therefore imminent, and are moderate in magnitude. We find the current LPN of 8 is appropriate.⁶

⁶ Fish and Wildlife Service, 50 CFR Part 17, [Docket No. FWS–HQ–ES–2016–0095; FF09E21000 FXES11190900000 167]. Endangered and Threatened Wildlife and Plants; Review of Native Species That Are Candidates for Listing as Endangered or Threatened; Annual Notification of Findings on Resubmitted Petitions; Annual Description of Progress on Listing Actions. Federal Register/Vol. 81, No. 232/Friday, December 2, 2016/Proposed Rules, p. 87263.

The EA must consider how cattle grazing will impact whitebark pines, which we found in Jordan basin Unit, Dunderberg, and Cameron Creek Allotments.

Vegetation communities should be mapped, including such potentially-present communities as native upland grassland, native grass-sedge meadow, dandelion-dominated meadows, cheatgrass stands, crested wheatgrass stands, lodegpole pine forest, whitebark pine forest, aspen groves, willow riparian, wet meadows, montane chaparral, bitterbrush shrublands, low sagebrush (*Artemisia arbuscula*) shrublands, black sagebrush (*A. nova*) shrublands, basin big sagebrush shrublands (*A. tridentata* ssp. *tridentata*), mountain big sagebrush (*A. t. ssp. vaseyana*), Wyoming big sagebrush (*A. t. ssp. wyomingensis*) shrublands, Jeffrey pine groves, pinyon-juniper woodland, alpine forb communities, and others.

The EA must consider protection of all listed, rare and special status plant species from adverse effects caused by livestock grazing and grazing management activities; eradication and or control of existing populations of noxious weeds; and prevention of new introductions of noxious weeds caused by livestock management activities. The alternatives should include not only maintaining the current vegetation condition but also a stable to upward trend in total vegetative ground cover and range condition.

Invasive Weeds

We found cheatgrass (*Bromus tectorum*) in low quantities in a few places in the Dunderberg and Cameron Canyon Allotments. The native grass and sagebrush scrub plant communities appear to be recovering well since 2009 when sheep were last removed. We found vigorous and abundant native bunchgrasses and rhizomatous grasses in uplands and meadows, such as Stebbins' bluegrass (*Poa stebbensii*)—a California endemic—as well as prairie junegrass (*Koeleria macrantha*), squirreltail grass (*Elymus elymoides*), thickspike wheatgrass (*Elymus lanceolatus* ssp. *lanceolatus*), blue wildrye (*Elymus glaucus*), Great Basin wildrye (*Elymus cinerreus*), creeping wildrye (*Elymus tritcoides*), needlegrasses (*Stipa* spp.), California brome (*Bromus carinatus*), as well as several species of sedge (*Eleocharis* spp.) and rush (*Juncus* spp.). In this matrix, various native forbs were seen growing, such as phlox (*Phlox* sp.), larkspur (*Delphinium* sp.), lupine (*Lupinus* spp.), pussypaws (*Calyptridium* sp.), cinquefoil (*Potentilla* sp.), fleabane (*Erigeron* sp.), white yarrow (*Achillea millefolium*), wild onion (*Allium* sp.), and hawksbeard (*Crepis* sp.).

Aspen groves in several places had a recovering lush understory of native plants. In Cameron Creek within the allotment we found native plants such as corn lily (*Veratrum californicum*), starry false Soloman's seal (*Maianthemum stellatum*), sweet cicely (*Osmorhiza* sp.), gooseberry (*Ribes* sp.), and stinging nettle (*Urtica dioica*) growing densely under aspen, harboring a pair of sooty grouse (*Dendragapus fuliginosus*) (May 24, 2018 visit). The EA must consider how cattle will impact these native plants. Grazing, trampling, vegetation removal, soil erosion, and increased disturbance could increase cheatgrass in these native plant communities.

In addition, we saw other introduced plants on our visit: dandelion (*Taraxacum* sp.) in meadows in the Dunderberg and Summer Meadow Allotment, some remnant crested wheatgrass (*Agropyron cristatum*) in slope meadows in Dunderberg Allotment, bulbous bluegrass (*Poa bulbosa*) in lower meadows of Cameron Canyon Allotment, and some common mullein (*Verbascum thapsus*) in low areas of Cameron Canyon Allotment. All these species could potentially spread with cattle disturbance—the EA must consider conditions to reduce the introduction and spread of these and other invasive weeds as well as monitor and control measures.

Recreation

This area is popular for camping, fishing, and hiking, as it presents several trail access points to the Hoover Wilderness and Yosemite National Park beyond. We found 6-10 dispersed primitive camp sites within the Dunderberg and Cameron Canyon Allotments. The EA must analyze how cattle will impact recreational users and wildlife viewing opportunities.

The area is within and adjacent to recreational fishing units for non-native game trout: the Cattle Creek Fishing Unit, Virginia Creek Fishing Unit, and others may be impacted by cattle grazing, according to maps provided by the State of California Natural resources Agency and California Department of Fish and Wildlife.⁷ Hunters may also use this area. The EA must also analyze the impacts of cattle grazing in this area on these trailhead access points and recreational activities.

The EA should also discuss the status of visitor use, visitor satisfaction, and progress toward meeting recreation objectives in this part of the Forest. Multiple use opportunities may be better met in this popular area for hiking, camping, fishing, and wildlife viewing, without the addition of cattle grazing. The Forest has worked to increase the quality and quantity of developed and dispersed recreation opportunities with particular emphasis in the Sierra Nevada, the EA must consider how cattle grazing and increased fencing could undermine recreational values and these efforts.

Designated Wilderness and Inventories Roadless Areas

We viewed how the project area includes a portion of the Hoover Wilderness. The Scoping Notice explains that livestock grazing, where established prior to the effective date of the Wilderness Act (September 1964), is permitted subject to reasonable regulations. However, what is considered reasonable must be considered in context. This area is popular with hikers, backpackers, mule packers, fishermen, birdwatchers, and other recreational users who do not want to see cattle excrement on subalpine and alpine

⁷ <u>https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5410679.pdf</u>, accessed May 2018.

meadows, high mountain lakes despoiled and denuded of shoreline vegetation, or the possibility for negative human-cow interactions.

The class of livestock is different than what occurred in 1964. Cattle have different impacts than do sheep. Further, there has been no grazing in the Wilderness for several years. As such, this is more like approval of new grazing in Wilderness than prior existing grazing.

Fencing is a good example of the differences in class of livestock and how that would affect Wilderness. Regarding new facilities, the congressional grazing guidelines state:

However, the construction of new improvements should be primarily for the purpose of resource protection and the more effective management of these resources rather than to accommodate increased numbers of livestock.

Yet, the scoping letter provides no information to suggest whether the amount of forage proposed to be allocated is more than what was allocated to sheep. Further, the proposal has as its target an increase in head months from the initial 800 to 1293.

Similarly, the scoping letter does not reveal to what degree suitable sheep range may be suitable for cattle. The Forest Plan (page IV-26) requires using the suitability standards on the Toiyabe National Forest. Indeed, some of the area is above 11,000 feet in elevation and very steep. Given the concern over suitability, there should be one alternative that does not allocate the Wilderness to cattle grazing.

The Scoping Notice also says that livestock grazing may also affect the roadless characteristics of Inventoried Roadless Areas (IRAs). The project area includes portions of the Hoover Cattle Creek, Hoover Green Creek North, Hoover Virginia Lakes, and Hoover Mt. Olsen IRAs. No new temporary or permanent roads would be constructed under the proposed action. However, the scoping notice does not explain if permittees be allowed to drive quads or trucks overland to place supplements, salt, or to fix fences or herd cattle. If allowed, the EA must analyze this type of impact that could inadvertently create new roads. Similarly, the EA must disclose and analyze whether any so-called "sustenance roads" would be allowed to be made by ranchers in Wilderness Areas and IRAs. We believe this would be an inappropriate use.

Cultural Resources

We found a boulder with bedrock mortars in Cameron Canyon Allotment, and many arborglyphs on aspens dating back to the 1920s in both Cameron Canyon and Dunderberg Allotments—the EA must consider how these and other cultural resources would be protected from cattle impacts. The EA must also disclose whether there are National Register of Historic Placeseligible places within these allotments or other cultural resources and include a Cultural Inventory.

Alternatives

At least one No Livestock Alternative should be analyzed. In addition, the Forest Service could consider an alternative that would permanently close these allotments and designate this area as a wildlife conservation area given the suite of Sierra Nevada species found on these allotments. Closing these allotments to grazing would benefit not only Threatened and Endangered species, but also water quality, soils, native vegetation, and recreational opportunities.

An alternative should be analyzed that would close the allotments and provide for managing the area as a forage reserve.

Another alternative could be to investigate all potential Sierra Nevada bighorn sheep habitat, both high-elevation summer, rut, connectivity corridor, and low elevation winter habitat in Great Basin shrub communities, and redraw allotment boundaries to eliminate possible future bighorn sheep overlap with cattle. This might necessitate fencing of a different geographic extent than proposed in the Scoping Notice and those fencing impacts would also need to be considered. This also might necessitate delaying issuing permits for livestock for another 10 years as these studies are ongoing.

Conclusion

Because of the great number of valuable resources, rare and listed species, potential significant cattle impacts to Sierra Nevada bighorn sheep and Bi-State sagegrouse, and high recreational values, we believe that an Environmental Impact Statement is needed to analyze the impacts of the proposed project of issuing cattle grazing permits for these allotments.

The Forest Service has the authority to decline to renew these grazing allotments to protect endangered species without a plan amendment, and this should be analyzed as the proposed alternative.

Thank you for considering these comments. Please keep Western Watersheds Project, the Center, and Wilderness Watch informed of all further substantive stages in this and related NEPA processes and documents at the addresses below.

Yours sincerely,

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Attachments:

Attachment 1: Map of critical habitats and proposed critical habitats Attachment 2: Map of CNDDB observations for several threatened species Attachment 3: Map of CNDDB observations of several species Attachment 4: Photographs – 5-24-18 Field Visit

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