# PEPC Project ID: 125241, DocumentID: 138943
# Correspondence: 1

## Author Information


| | |
|---|---|
| Keep Private: | No |
| Name: | [redacted] |
| Organization: | |
| Organization Type: | I-Unaffiliated Individual |
| Address: | [redacted] |
| E-mail: | [redacted] |


## Correspondence Information

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|---|---|
| Status: Reviewed | Park Correspondence Log: |
| Date Sent: Aug 19, 2024 | Date Received: Aug 19, 2024 |
| Number of Signatures: 1 | Form Letter: No |
| Notes: | |

## Correspondence Text

Grazing for 90+ years has proven to not cause harm to the environment…unless you create an issue. The grazing actually helps to manage the park by reducing the growth of the fields to a manageable level. Leave it alone.

# PEPC Project ID: 125241, DocumentID: 138943
# Correspondence: 2

## Author Information

| | |
|---|---|
| Keep Private: | No |
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| Organization: | |
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## Correspondence Information

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|---|---|
| Status: Reviewed | Park Correspondence Log: |
| Date Sent: Aug 21, 2024 | Date Received: Aug 21, 2024 |
| Number of Signatures: 1 | Form Letter: No |
| Notes: | |

## Correspondence Text

I strongly support and urge NPS to approve and implement the flexible grazing management alternative. This alternative would be much better than the status quo management and alternative. Livestock grazing causes many serious adverse resource impacts including on special status species, biological soil crusts, pollinators, and riparian habitats. This grazing also is the primary cause for the spread of cheatgrass and other harmful invasive plants.

NPS should be more proactive and bold in solving grazing related problems. It should not follow BLM's tragic pro grazing bias and failure to stop the degradation of millions of acres of public lands through authorized and chronic trespass grazing. Indeed, grazing is generally not compatible with the NPS "preserve and enjoy" organic law mandate.

I would prefer that all livestock grazing on NPS lands be phased out. But if this is not possible, I at least support grazing reforms to stop further damage and allow degraded NPS lands to begin healing. The health of public resources on NPS lands should not be sacrificed or jeopardized to advance the private profits of ranchers.

Thank you very much for this important work and for your kind consideration of my comments.

# PEPC Project ID: 125241, DocumentID: 138943
# Correspondence: 3

## Author Information


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| Keep Private: | No |
| Name: | |
| Organization: | |
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## Correspondence Information

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|---|---|
| Status: Reviewed | Park Correspondence Log: |
| Date Sent: Aug 23, 2024 | Date Received: Aug 23, 2024 |
| Number of Signatures: 1 | Form Letter: No |
| Notes: | |

## Correspondence Text

I would rather eat elk or bison. Does the definition of livestock include elk and bison? The cow has to be the greatest destructive invasive specie unleashed on public lands ever.

I would happily go vegetarian if thats what it took to remove cattle from public lands. Hiking, riding, camping on public lands where cattle are is digusting. Every creek and water source top to bottom will be tore up and polluted with manure.

Remove the cow and restore big game.

# PEPC Project ID: 125241, DocumentID: 138943
# Correspondence: 4

## Author Information


| | |
|---|---|
| Keep Private: | No |
| Name: | [redacted] |
| Organization: | |
| Organization Type: | I-Unaffiliated Individual |
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| E-mail: | [redacted] |


## Correspondence Information

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|---|---|
| Status: Reviewed | Park Correspondence Log: |
| Date Sent: Aug 25, 2024 | Date Received: Aug 25, 2024 |
| Number of Signatures: 1 | Form Letter: No |
| Notes: | |

## Correspondence Text

I am supportive of alternative b. Current scientic research, climate change, and projected increased visitor usage should all be considered to determine what if any revisions should be made to the existing grazing plan. The NPS should not continue with the existing system without first completing an environmental review. The national parks were established for the enjoyment if all, including future generations. The desire of a few should not be put above that mandate.

# PEPC Project ID: 125241, DocumentID: 138943
# Correspondence: 5

## Author Information


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|---|---|
| Keep Private: | No |
| Name: | [redacted] |
| Organization: | |
| Organization Type: | I-Unaffiliated Individual |
| Address: | [redacted] |
| E-mail: | [redacted] |


## Correspondence Information

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|---|---|
| Status: Reviewed | Park Correspondence Log: |
| Date Sent: Aug 29, 2024 | Date Received: Aug 29, 2024 |
| Number of Signatures: 1 | Form Letter: No |
| Notes: | |

## Correspondence Text

I agree with the Grazing Tools and Strategies Alternative, but would suggest two additional Potential Tools and Management Strategies.

1) Grazing allotments should be priced consistent with private grazing rates so as to not undercut the private market.

2) Grazing allotments should be made available to organizations that would not place animals on the allotment. Opening up the competition for grazing allotments to bidders who would allow the allotment to "lie fallow" is an expression of free-market principles that would allow the market to have a say in the use of these lands.

# PEPC Project ID: 125241, DocumentID: 138943
# Correspondence: 6

## Author Information

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| Keep Private: | No |
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| Organization Type: | I-Unaffiliated Individual |
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| | Montrose, CO 81401<br>USA |
| E-mail: | |

## Correspondence Information

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|---|---|
| Status: Reviewed | Park Correspondence Log: |
| Date Sent: Sep 11, 2024 | Date Received: Sep 11, 2024 |
| Number of Signatures: 1 | Form Letter: No |
| Notes: | |

## Correspondence Text

Please pursue the preliminary action alternative.

Grazing should not be allowed in the National Park Service as it conflicts with the Organic Act's mission to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations. Livestock grazing is damaging and destructive to wildlife, water, soil, vegetation, and the visitor experience in National Parks. Federally subsidized grazing of privately owned non-native species, such as cows, should be eliminated from all NPS-managed lands.

The preliminary action alternative is better than taking the no-action option. The NPS needs to reduce grazing impacts on natural and cultural resources by all means and methods. The suggested monitoring program should be mandatory and allow the agency to adjust or stop grazing to protect the environment. The sage grouse, bighorn sheep, wilderness, and recreation, and all the other natural and cultural resources, should be the top priority to protect, not cows.

# PEPC Project ID: 125241, DocumentID: 138943
# Correspondence: 7

## Author Information


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|---|---|
| Keep Private: | No |
| Name: | [redacted] |
| Organization: | |
| Organization Type: | I-Unaffiliated Individual |
| Address: | [redacted] |
| E-mail: | [redacted] |


## Correspondence Information

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|---|---|
| Status: Reviewed | Park Correspondence Log: |
| Date Sent: Sep 20, 2024 | Date Received: Sep 20, 2024 |
| Number of Signatures: 1 | Form Letter: No |
| Notes: | |

## Correspondence Text

Livestock grazing in both parks should be continued in perpetuity as it can be a useful management tool that can benefit the landscape, the wildlife and local economies. It is beneficial in fire suppression and to generate regrowth that deer and elk thrive on. Further, grazing was an established practice on the lands of both parks before they were in the park systems. On these permitted grazing allotments, it is important that permittees can use heavy equipment as needed for water development as well as fence and trail maintenance. Trailing livestock across these lands as needed to reach other grazing lands should be available as needed. Any changes to the current grazing plans need to take into account surrounding BLM and USFS allotments and access to them. It is also very important to manage these lands for all species and never manage one or two species over any others. When this practice of managing for only one or two species is used, it can result in long term harm to other species and we want the whole ecosystem to thrive. Be careful not to manage for sage grouse at the expense of other species within the area.
I don't like where the newsletter says that… 'In CURE, after 5 consecutive years of vacancy, the allotment would be retired.' I don't think that this door should ever be completely closed. If there is grass and water available and if there is an interested party, the allotment should be available even if it is years down the road.
I also don't like where the newsletter says '…however, NPS would not allow permit transfers and would not re-issue permits in occupied GUSG critical habitat.' First, again, the door should not be closed. Secondly, this is selecting for one species in the entire ecosystem, while allowing others to be potentially harmed or left unmanaged. It is poor planning to only manage for one species.
In the case of pasture rest periods, be very upfront with permittees, giving them plenty of notice, communication and offering vacant permits if available. Ranchers rely on these permits and rests should be only used if an alternative is available. Such as grazing in an alternate season than usual or if NPS has helped to find an alternative area to graze, such as a vacant permit.
Also, when season of use is adjusted for the breeding season of the GUSG (or any other species), remember to take into account that grazing in that time period may be the best management for unwanted grasses such as cheat grass and that livestock have likely grazed in that timeframe since the

early 1900's or before without harming GUSG populations.
Today the primary resources of concern are Gunnison Sage Grouse and Bighorn sheep, but I don't think they should be listed as such in the plan, because down the road, it may be another resource that needs special management. And again, it is never good practice to manage a whole ecosystem on only one or two resources. The entire environment needs to be considered.
Thank you for considering my comments.

# PEPC Project ID: 125241, DocumentID: 138943
# Correspondence: 8

## Author Information

| | |
|---|---|
| Keep Private: | No |
| Name: | [redacted] |
| Organization: | Delta County Commissioners (Official Rep.) |
| Organization Type: | C - County Government |
| Address: | [redacted] |
| E-mail: | [redacted] |

## Correspondence Information

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|---|---|
| Status: Reviewed | Park Correspondence Log: |
| Date Sent: Sep 20, 2024 | Date Received: Sep 20, 2024 |
| Number of Signatures: 1 | Form Letter: No |
| Notes: | |

## Correspondence Text

September 20, 2024

National Park Service

TO: Black Canyon of the Gunnison National Park and Curecanti National Recreation Area - Grazing Management Plan

Delta County Board of Commissioners (BoCC) appreciates the opportunity to comment on the Black Canyon of the Gunnison National Park and Curecanti National Recreation Area Grazing Management Plan. Livestock production in Delta County contributes $47,000,000 in direct sales on an annual basis and the ability to graze our public lands provides for that economic contribution from agriculture. Delta BoCC fully supports Alternative A given all of the additional constraints that are currently in place to protect Gunnison Sage Grouse (GuSG) and Bighorn Sheep as well as the management of the National Park System. There is no additional need to add to the complexities found in Alternative B. Alternative B proposal is duplicative of existing policies, regulations and practices

The downward trend of the GuSG has no specific scientific reason nor has the population responded to millions of dollars and thousands of hours of cooperative partnerships. It is imperative in any planning document that management flexibility is maintained to be able to respond to drought, habitat loss and fragmentation, more frequent wildfires and changing ecological and climate conditions.

In addition to the University of Idaho research documented in the Bureau of Land Management Gunnison Sage Grouse Resource Management Plan Amendments/EIS comments, Hagen 2011 compared grouse populations in grazed and ungrazed from 1981-2010 on the Hart Mountain National Antelope Refuge in Oregon. Hart Mountain Refuge was grazed until 1995, then livestock were removed. The populations have highs and lows at the same time periods throughout the 30-year period, reflecting that something other than grazing is affecting population dynamics. Grazing timing, intensity,

and duration may have more to do with impacts to habitat than utilization levels. Timing, intensity, and duration are accomplished with grazing rotations and are measured with long term monitoring.
In summary, Delta County encourages the NPS to continue to work with the livestock community to provide large intact landscapes which are in the best interest of all wildlife especially with an increasing recreation focus and impact.

Sincerely,
Delta Board of County Commissioners

[redacted]

# PEPC Project ID: 125241, DocumentID: 138943
# Correspondence: 9

## Author Information


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| Keep Private: | No |
| Name: | [redacted] |
| Organization: | LeValley Ranch (Official Rep.) |
| Organization Type: | I-Unaffiliated Individual |
| Address: | [redacted] |
| E-mail: | [redacted] |


## Correspondence Information

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|---|---|
| Status: Reviewed | Park Correspondence Log: |
| Date Sent: Sep 20, 2024 | Date Received: Sep 20, 2024 |
| Number of Signatures: 1 | Form Letter: No |
| Notes: | |

## Correspondence Text

September 20, 2024

National Park Service

TO: Black Canyon of the Gunnison National Park and Curecanti National Recreation Area - Grazing Management Plan

LeValley Ranch II Ltd has been operating since 1914 and has utilized United States Forest Service, National Park Service and Bureau of Land Management allotments for the last seventy years. We actively monitor our allotment in partnership with the Bureau of Land Management and work diligently with US Fish and Wildlife Service to provide quality habitat for the Gunnison Sage-grouse. LeValley Ranch has intensively monitored our range allotments since 1995 and use line intercept transects, RAP data, photos and observational data to make informed management decisions. We urge NPS to avoid arbitrary decision-making and require decision regarding management and numbers of livestock to be based on quantitative data that considers long-term vegetation trend. Additionally, quantitative data should be used when determining carrying capacity.
Land Health Assessments done in this area in 2011 and recently show that all requirements were being met. The managed grazing implemented in this area prior to when the Park was established have resulted in the improved on the ground conditions as documented by monitoring and satellite imagery. The rotation allows for almost two years of rest for the area with very limited trailing and use of the corrals.
LeValley Ranch supports Alternative A. In addition, as previously mentioned livestock grazing was not in the top five threats of the USFWS listing Gunnison Sage grouse decision.
Moderate livestock grazing (e.g., grazing that balances the intensity, frequency, duration, and timing of grazing with variable vegetation/ forage resources) that supports the persistence of perennial bunchgrasses, has been shown to be compatible with sage-grouse population metrics (Boyd et al., 2014; Dettenmaier, 2018; Doherty et al., 2021; Smith et al., 2020, 2018a, 2018b). Sage-grouse have been

found to be generalists, exhibiting great flexibility when selecting habitat at the fine scale. This fine-scale vegetation, such as bunchgrass cover or shrub structure, does not influence nest success consistently and has weak effects on nest site selection according to a range-wide meta-analysis (Smith et al., 2020). Optimum sage-grouse habitat consists large tracts of land encompassing diverse seasonal habitats (Knick and Connelly, 2011), including healthy tracts of sagebrush that include an herbaceous understory composed of large perennial grasses, perennial forbs, and insect food resources during the nesting season (Boyd et al., 2014; Crawford et al., 2004). Thus, management objectives for sage-grouse and grazing should focus on promoting vegetation conditions that promote resiliency to ecosystem-scale threats such as wildfire and resistance to exotic annual grasses rather than fine-scale vegetation metrics. Not only is livestock grazing the primary land-use in sage-grouse habitat, but it can also be employed strategically to improve or maintain rangeland condition by addressing these range-wide threats. LeValley Ranch manages livestock with the long-term trend in mind. These management practices are best outlined in Shawver et.al., Climate Change Resiliency in Colorado: Grazing System Best Management Practices, 2020.

In summary, we target for moderate utilization on an annual basis, rotate the season of use and manage the time and timing of distribution. In addition, the perennial grasses and the height of each of the grasses has increased in number of species and vigor as compared to the 1980's and 90's. This has been done as conditions have become drier and wildlife use has changed. The decrease in Gunnison Sage grouse numbers is similar across the entire landscape and not just specific to the Crawford area. LeValley Ranch has had a long historic good working relationship with the NPS and will continue to do so. If you have specific questions or concerns, feel free to reach out.

Sincerely,

[redacted]
LeValley Ranch II Ltd RLLP

# PEPC Project ID: 125241, DocumentID: 138943
# Correspondence: 10

## Author Information

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|---|---|
| Keep Private: | No |
| Name: | [redacted] |
| Organization: | Western Watersheds Project |
| Organization Type: | P - Conservation/Preservation |
| Address: | [redacted] |
| E-mail: | [redacted] |

## Correspondence Information

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|---|---|
| Status: Reviewed | Park Correspondence Log: |
| Date Sent: Sep 20, 2024 | Date Received: Sep 20, 2024 |
| Number of Signatures: 1 | Form Letter: No |
| Notes: | |

## Correspondence Text

Colorado Office
PO Box 1175
Paonia, CO 81428
[redacted]
www.westernwatersheds.org
Working to protect and restore Western Watersheds and Wildlife

September 20, 2024

Superintendent Stuart West
Black Canyon of the Gunnison National Park and Curecanti National Recreation Area
102 Elk Creek
Gunnison, CO 81230

Thank you for the opportunity to provide scoping comments for the Black Canyon National Park (BLCA) and Curecanti National Recreation Area (CURE) Grazing Management Plan. We are pleased that the National Park Service (NPS) is updating their guidance for the administration of these lands with regard to the grazing of domestic livestock, and are hopeful that the outcomes of this project will provide a marked benefit to the ecosystem, wildlife, resources, and user experience of both units, and fulfill its commitment to preserve and protect the natural, cultural, and recreational resources as stated in the purposes of the park units and and as directed by the NPS Organic Act(1).

The following comments are submitted on behalf of Western Watersheds Project (WWP) and the

Center for Biological Diversity. WWP is a non-profit environmental conservation organization representing the interests of 14,000 members and supporters. WWP works to influence and improve public lands management throughout the western United States in order to protect native species and conserve and restore the habitats they depend on. WWP works to protect and conserve the public lands, wildlife and natural resources of the American West through education, public policy initiatives, and litigation. WWP is a leader in advocacy for the conservation of the sagebrush steppe, Gunnison Sage Grouse, and bighorn sheep.

The Center for Biological Diversity (Center) is a 501(c)(3) nonprofit organization based in Tucson, Arizona, with offices across the country including in Colorado and has more than one million members and online activists. The Center is dedicated to protecting and restoring imperiled species and natural ecosystems. The Center uses science, policy, and law to advocate for the conservation and recovery of species on the brink of extinction and the habitats they need to survive. The Center, as it has for decades, continues to actively advocate for increased protections for species and their habitats across Colorado.

Existing Management Guidance
We anticipate that the NPS will assess the impacts of livestock grazing from an ecological perspective, recognizing that these park units have a responsibility to prioritize benefit to the ecosystem, wildlife, resources, and user experience above multiple uses and the economic productivity of these lands. We expect that the Grazing Management plan will include an assessment of how grazing in these park units conforms with the 2006 NPS Management Policies.

A specific area of concern is the consideration of Unacceptable Impacts in NPS managed units(2). For the purposes of this plan development, the consideration of unacceptable impacts should include impacts both individually and cumulatively, and should ensure that impacts of livestock grazing are not inconsistent with a park's purposes or values.

The 2006 NPS Management Policies also direct that it is a priority to "reestablish natural functions and processes in parks", and in the case of human disturbances "return such disturbed areas to the natural conditions and processes characteristic of the ecological zone in which the damaged resources are situated", and encourages removal of exotic species(3). In the subsection directing management of exotic species the policy explicitly states that "Domestic livestock such as cattle, sheep, goats, horses, mules, burros, reindeer, and llamas are exotic species that are maintained in some parks for commercial herding, pasturing, grazing, or trailing", but that "The Service will phase out the commercial grazing of livestock whenever possible"(4). Under this guidance, the range of alternatives for this analysis should include removal of these exotic species from the park units and closure of the allotments.

These policies lay out specific expectations for livestock grazing, including management to ensure that "ecosystem dynamics and the composition, condition, and distribution of native plants and animal communities are not significantly altered or otherwise threatened" and that grazing "does not cause unacceptable impacts on park resources and values"(5). This management direction indicates that the NEPA process must substantively address the threats that livestock grazing and trailing pose to ecosystem health, sensitive native species including Gunnison sage grouse and bighorn sheep, wilderness values, and to the recreational experience of park users.

Adaptive Management
We appreciate the emphasis on managing grazing so that allotments meet satisfactory range conditions, contain functioning riparian and stream systems, and maintain healthy ecosystems. The adaptive

management framework could be a valuable approach for improving grazing practices, but unless the Grazing Management Plan defines thresholds for acceptable conditions and establishes trigger points to change practices, these adaptive management strategies do not sufficiently address threats to ecological health and species recovery. The adaptive management framework leaves a great deal of latitude to local managers who are under pressure to balance many interests and are not always able to prioritize management for the best outcomes for the ecosystem. Relying on this framework without the necessary accountability and metrics likely will not result in sufficient protections for the ecosystem and falls short of the analysis and transparency that NEPA requires. If NPS is going to utilize an adaptive management approach, it must prescribe standards and trigger points based on measurable thresholds and indicators of impact.

## Reasonable Range of Alternatives

In taking a "hard look" at impacts that NEPA requires, an EA or EIS must study, develop, and describe reasonable alternatives to the proposed action (6). The Tenth Circuit explains that this mandate extends to EAs as well as EISs. "A properly-drafted EA must include a discussion of appropriate alternatives to the proposed project."(7) This alternatives analysis "is at the heart of the NEPA process, and is 'operative even if the agency finds no significant environmental impact.'"(8) Reasonable alternatives must be analyzed for an EA even where a FONSI is issued because "nonsignificant impact does not equal no impact. Thus, if an even less harmful alternative is feasible, it ought to be considered."(9) When an agency considers reasonable alternatives, it "ensures that it has considered all possible approaches to, and potential environmental impacts of, a particular project; as a result, NEPA ensures that the most intelligent, optimally beneficial decisions will ultimately be made."(10)

Here, reasonable alternatives to consider include, but are not limited to:<br>
Requiring a minimum grass length of at least 7 inches;<br>
Timing restrictions that would protect GuSG from grazing from March 15 to July 15;<br>
Retiring the grazing allotments;<br>
Removing further grazing from wilderness areas within the analysis area; and,<br>
Prohibiting domestic sheep grazing and trailing in areas that overlap with bighorn sheep habitat.

## Baseline Conditions

Any EA or EIS must succinctly describe the environment of the area(s) to be affected or created by the alternative under consideration. NEPA also requires the action agency to set an appropriate baseline detailing the nature and extent of the resources in the area: "The concept of a baseline against which to compare predictions of the effects of the proposed action and reasonable alternatives is critical to the NEPA process."(11) "Without establishing ... baseline conditions ... there is simply no way to determine what effect [an action] will have on the environment and, consequently, no way to comply with NEPA."(12)

Without baseline data, neither the public nor the agency can understand the effects of the proposed action or craft and analyze alternatives and mitigation measures to protect these values. As such, NPS must identify the environmental baseline and affected environment, as well as the scope of impacts and where those impacts are most likely to be felt.

## Meaningful Direct, Indirect, and Cumulative Impacts Analysis

The NPS's analysis must appropriately disclose and analyze the direct, indirect, and cumulative impacts of the alternatives that will be analyzed in this NEPA process. Appropriate cumulative impacts analysis must account for impacts of the proposal when taken together with impacts of other reasonably foreseeable actions. For example, this must disclose impacts when taken together with:

Past, present, and reasonably foreseeable livestock grazing in the area;
Past, present, and reasonably foreseeable recreational activity;
Livestock as a potential pathogen vector, including risk of transmission of Mycoplasma ovipneumoniae, Mannheimia haemolycta, and avian influenza;
Climate change; and,
Noxious and invasive weed infestations.

These impacts should be discussed and analyzed specifically in the context of impacts on GuSG and its habitat. Any NEPA document must do more than merely list other projects and assert that impacts will not rise to the level of significance, should the NPS conduct analysis via an EA.

Gunnison Sage-grouse

Because of the NPS's clear responsibility to prioritize preservation and conservation, the plan should consider whether livestock grazing can truly be compatible with conserving Gunnison sage-grouse (GuSG) and their habitat. We appreciate the acknowledgement that GuSG can be impacted by poorly managed livestock grazing through alterations of the composition and productivity of plant communities. To comply with the policy direction for park units, the grazing management plan should exceed what is prescribed by the BLM or Forest Service for GuSG protection.

We recommend that the NPS independently refer to the best available science about the impacts of livestock grazing on GuSG. A forage utilization limit of 35% is the maximum allowable per best available scientific information (Boyd et al. 2014, Galt et al. 2000). The NPS should apply this 35% forage utilization standard as an absolute maximum across all GuSG habitats, not just to riparian areas if grazing is retained in GuSG habitats. Additionally, best available science establishes that at least 7 inches of residual stubble height needs to be provided in nesting and brood-rearing habitats throughout their season of use. According to Gregg et al. (1994: 165), "[l]and management practices that decrease tall grass and medium height shrub cover at potential nest sites may be detrimental to sage grouse populations because of increased nest predation... Grazing of tall grasses to <18 cm would decrease their value for nest concealment" (see also Connelly et al. 2000, Hagen et al. 2007, Herman-Brunson et al. 2009). For Gunnison sage grouse, Prather (2010) found that occupied habitats averaged more than 7 inches of grass stubble height in Utah, while unoccupied habitats averaged less than the 7-inch threshold. Foster et al. (2014) found that livestock grazing could be compatible with maintaining sage grouse populations, but notably stubble heights they observed averaged more than 18 cm during all three years of their study and averaged more than 10.2 inches in two of the three years of the study (see also Kaczor at al. 2011). This finding is consistent with the conclusion based on the science that maintaining at least 7 inches of residual stubble is necessary to maintain and recover GuSG populations. In Colorado sagebrush habitats, Manier and Hobbs (2007) found that excluding grazing resulted in threefold greater shrub cover and less bare ground, indicating that grazing influences visual detection of grouse beyond stubble height effects.

We appreciate the plan's consideration of a seasonal closure to protect lekking and early brood-reading GuSG. A growing body of evidence suggests that seasonal closures during GuSG lekking, nesting, and early brood-rearing may not be sufficient to protect populations. Davis et al. (2016) found that GuSG juvenile survival was lowest in the late brood-rearing stage during the late summer (June - October). During this period, sage-grouse are often found in meadows (Peterson 1970, Drut et al. 1994) and riparian areas (Crawford et al. 2004, Dinkins et al. 2014) adjacent to sagebrush (Peterson 1970), particularly in areas with good grass and forb cover (Herman-Brunson 2007, Kirol et al. 2012). Unfortunately, livestock also congregate and disproportionately impact these crucial riparian areas and meadows during this time period. Because the proposed seasonal grazing restrictions only apply during the lekking, nesting, and early brood-rearing periods, they do not address this crucial period for juvenile survival.

One of the greatest threats to Gunnison Sage Grouse recovery is the proliferation of cheatgrass. As such, this permit renewal environmental assessment must adequately analyze the relationship between livestock grazing and cheatgrass spread. Not only are livestock known to spread cheatgrass seeds, but cattle hoof action can deteriorate biological soil crusts in sagebrush steppe ecosystems (Reisner et al. 2013, Root et al. 2020), which are an important cheatgrass invasion inhibitor (Condon et al. 2023, Chambers et al. 2016). The claim that livestock grazing can be used to inhibit or reverse cheatgrass infiltration is refuted by Williamson et al. 2020, stating, "grazing corresponds with increased cheatgrass occurrence and prevalence regardless of variation in climate, topography, or community composition, and [data and results] provide no support for the notion that contemporary grazing regimes or grazing in conjunction with fire can suppress cheatgrass." The CURE/BLCA Grazing Management Plan assessment must appropriately address the role that livestock play in the infiltration and proliferation of cheatgrass, and to apply best management practices to reduce livestock's facilitation of the spread of invasive species in GuSG habitat. We strongly recommend the NPS eliminate livestock grazing wherever cheatgrass is found, not only within GuSG habitat. We also note that the NPS must consult with the U.S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act on this proposal and its effects on this imperiled endemic species.

We are concerned about the GuSG habitat overlap on the Green Mountain, Grizzly Gulch, Dead Horse Common, Spring Gulch, North Cimarron, Soap Creek, Stevens Creek Commons, Steuben Creek, McIntosh Mountain, Iola, Sapinero Mesa, Big Willow, Pine Mesa, Windy point, Blue Creek, Round Corral Spring, Round Corral Creek, and Rawhide-Coffee Pot allotments. Particularly, the Grizzly Gulch and Green mountain allotments overlap a dense area of active leks for the Crawford GuSG population. Similarly, Stevens Creek Commons, Steuben Creek, McIntosh Mountain, Iola, Sapinero Mesa, Pine Mesa, and Rawhide-Coffee Pot overlap crucial lek buffers for the West Gunnison GuSG population. This overlap makes seasonal closure an absolute minimum requirement for these allotments, and greater consideration should be given to closing them completely. Allotments with unoccupied habitat overlap, including Dead Horse Common, Spring Gulch, North Cimarron, Soap Creek, Big Willow, Blue Creek, Round Corral Spring, and Round Corral Creek, must also be protected from livestock grazing disturbance and habitat impacts to encourage repopulation and true species recovery.

Bighorn Sheep

We appreciate that the scoping notice acknowledges the risk to Bighorn sheep posed by livestock grazing through disease transmission. We support the management direction to be consistent with State of Colorado management (2009) and recommendations of Western Association of Fish and Wildlife Agencies (Wild Sheep Working Group 2012). It is absolutely essential that the NPS's plan includes direction to always provide spatial and temporal separation of domestic sheep and bighorn sheep to mitigate potential interspecies disease transmission when authorizing or permitting grazing or trailing plans.

We are concerned about areas of potential overlap between bighorn sheep occupied habitat and billed BLM domestic sheep/goat grazing in the Sapinero Mesa, Big Willow, Rawhide/Coffee Pot, and Green Mountain allotments, or any other areas with domestic sheep grazing or trailing. Because of the animal behavior of bighorn sheep, including long-distance foraying behavior, it is likely that allotments beyond the modeled bighorn sheep habitat also have the potential for contact between domestic sheep and bighorn sheep. We request that this Grazing Plan analysis includes a complete risk of contact modeling assessment using up-to-date core habitat and foray data from Colorado Parks and Wildlife to substantively address the threat that permitted domestic sheep pose to native bighorn sheep.

Wilderness

We appreciate the NPS's acknowledgement of how the presence of grazing operations and unauthorized rangeland infrastructure can impact the naturalness and other characteristics of designated wilderness. We support the removal of two-track roads, trailing routes, and unauthorized infrastructure such as stock ponds, fences, stock tanks, and irrigation lines, but the NEPA analysis should explain how virtual fencing can be implemented consistently with wilderness restrictions.

Recreation

The scoping notice recognizes that conflicts between recreationists and livestock can impact grazing operations, but the analysis of grazing on these units should recognize the priorities of park purposes and acknowledge also that livestock grazing can have a substantial impact on visitor experience. The Grazing Management plan must reconcile these impacts with the purposes and the values of the BLCA and CURE.

Furthermore, the analysis must analyze how proposed alternatives to address conflict would impact GuSG, especially given that potential solutions could include development of linear features, such as fences, that have a known and deleterious impact on the imperiled GuSG.

Conclusion

Thank you for your full consideration of our comments and concerns. We look forward to reviewing future NEPA documents for this project. Please ensure that we are advised of the availability of any future NEPA documents in a timely manner and that WWP and the Center remain on the contact list/interested party list for this project. Please do not hesitate to reach out if you have any questions about these comments.

Sincerely,

Delaney Rudy, Colorado Director
Western Watersheds Project
[redacted]

Allison N. Henderson
Southern Rockies Director, Senior Attorney
Center for Biological Diversity
[redacted]

Footnotes:

1 54 U.S.C. § 100101
2 See National Park Service Management Policies, (2006) at 12, 1.4.7.1. 3 See National Park Service Management Policies, (2006) at 39, 4.1.5.
4 See National Park Service Management Policies, (2006) at 47, 4.4.4.1
5 See National Park Service Management Policies, (2006) at 116, 8.6.8.2.
6 42 U.S.C. § 4332(2)(C)&(E).
7 Davis v. Mineta, 302 F.3d 1104, 1120 (10th Cir. 2002) (granting injunction where EA failed to consider reasonable alternatives).
8 Diné Citizens Against Ruining Our Env't v. Klein, 747 F. Supp. 2d 1234, 1254 (D. Colo. 2010) (quoting Greater Yellowstone Coal. v. Flowers, 359 F.3d 1257, 1277 (10th Cir. 2004)). See also W. Watersheds Project v. Abbey, 719 F.3d 1035, 1050 (9th Cir. 2013) (in preparing EA, "an agency must still give full and meaningful consideration to all reasonable alternatives" (emphasis added) (internal quotation and citation omitted)).
9 Ayers v. Espy, 873 F. Supp. 455, 473 (D. Colo. 1994) (internal citation omitted).
10 Wilderness Soc'y v. Wisely, 524 F. Supp. 2d 1285, 1309 (D. Colo. 2007) (quotations & citation omitted).\
11 See Council on Environmental Quality, Considering Cumulative Effects under the National Environmental Policy Act (Jan. 1997) at 41, available at https://ceq.doe.gov/publications/cumulative_effects.html (last viewed Sept. 19, 2024).
12 Half Moon Bay Fishermans' Mktg. Ass'n v. Carlucci, 857 F.2d 505, 510 (9th Cir. 1988).

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# PEPC Project ID: 125241, DocumentID: 138943
# Correspondence: 11

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## Correspondence Information

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| Number of Signatures: 1 | Form Letter: No |
| Notes: | |

## Correspondence Text

To Whom it May Concern:

Thank you for taking our comments.

Livestock grazing in CURE and BLCA should be continued forever as it can be a useful management tool that can benefit the landscape, the wildlife and local economies. It is beneficial in fire suppression and to generate regrowth that deer and elk thrive on. Further, grazing was an established practice on the lands of both parks before they were in the park systems. On these permitted grazing allotments, it is important that permittees can use heavy equipment as needed for water development as well as fence and trail maintenance. Trailing livestock across these lands as needed to reach other grazing lands should be available as needed. Any changes to the current grazing plans need to take into account surrounding BLM and USFS allotments and access to them. It is also very important to manage these lands for all species and never manage one or two species over any others. When this practice of managing for only one or two species is used, it can result in long term harm to other species and we want the whole ecosystem to thrive.
We don't like where the newsletter says that… 'In CURE, after 5 consecutive years of vacancy, the allotment would be retired.' I don't think that this door should ever be completely closed. If there is grass and water available and if there is an interested party, the allotment should be available even if it is years down the road.
We also don't like where the newsletter says '…however, NPS would not allow permit transfers and would not re-issue permits in occupied GUSG critical habitat.' First, again, the door should not be closed. Secondly, this is selecting for one species in the entire ecosystem, while allowing others to be potentially harmed or left unmanaged. It is poor planning to only manage for one species. Furthermore, as grazing has been on these lands since long before BLM, USFS, or NPS and in greater numbers than we see today without harming these grouse populations (If the grazing did cause harm the populations, the birds would have been gone long before recent years). Instead, after continued management for sage grouse alone, the bird population has continued to decline in areas where our parents and us used to see

them regularly. When cattle were abundant, the birds were abundant. It may be a good idea to look somewhere else for the problem when creating the grazing plan.

In the case of pasture rest periods, be very upfront with permittees, giving them plenty of notice, communication and offering vacant permits if available. Ranchers rely on these permits and rests should be only used if an alternative is available. Such as grazing in an alternate season than usual or if NPS has helped to find an alternative area to graze, such as a vacant permit.

Also, when season of use is adjusted for the breeding season of the GUSG (or any other species), remember to take into account that grazing in the early spring (sage grouse breeding season) may be the best management for unwanted vegetation such as cheat grass and that livestock have likely grazed in that timeframe since the early 1900's or before without harming GUSG populations.

Today the primary resources of concern are Gunnison Sage Grouse and Bighorn sheep, but we don't think they should be listed as such in the plan, because down the road, it may be another resource that needs special management. And again, it is never good practice to manage a whole ecosystem on only one or two resources. The entire environment needs to be considered.

# PEPC Project ID: 125241, DocumentID: 138943
# Correspondence: 12

## Author Information

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## Correspondence Information

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## Correspondence Text

Given the experience of the USFS and BLM in grazing management, the No-Action Alternative represents the best opportunity for successful implementation of a NPS grazing program. In the seven-page document describing two alternatives, the section dedicated to the No-Action Alternative is four sentences. It is clear that the No-Action alternative is not given serious consideration. It is critical that this process incorporates a range of alternatives that create a viable path forward.
As this summary focuses almost entirely on the Grazing Tools and Strategies Alternative (GTSA), these comments focus on an alternative presented as a forgone conclusion. Commentors are encouraged to submit detailed information for the development of alternatives; the comment portal is not conducive to the line-by-line analysis necessary to provide the relevant, new and detailed information requested. Montrose County will make this analysis available upon request. Further, this initial effort speaks to an intended outcome where "relevance" is limited to the ideological scope of the GTSA. This summary does not speak to a process where relevant, new or detailed information can result in a significant departure from what has been presented. For detailed information to inform a viable outcome, an adequate range of alternatives is needed. As a committed cooperating agency in numerous public lands policy issues, Montrose County consistently engages in all forms of communication consistent with interagency agreements. The explicit limitation of submission opportunities and comment formats significantly limits opportunity for engagement and development of alternatives and plan components that can better meet objectives in these landscapes.
The title "Grazing Tools and Strategies Alternative," insinuates actions where grazing and management actions can support desired conditions across these landscapes; the finer points of the GTSA speak to "tools and strategies" to eliminate grazing. Among a range of mechanisms, wilderness character, roads, and recreational conflicts are identified in the GTSA as opportunities to limit or eliminate grazing. Existing uses were defined through wilderness designations, travel management, and recreation management planning. The GTSA is not a mechanism to eliminate existing permitted use in these areas, nor is it a mechanism to supersede existing planning efforts. These are not the only examples of this rationale. When the GTSA speaks to the negative impacts of recreation on grazing permittees, the proposed solution is to eliminate grazing; this does not speak to an objective planning process that

meets the intent of the National Environmental Policy Act.

With decades-long management experience and evolving grazing management in the BLM and USFS, the apparent intent to reinvent grazing management on NPS lands is further evidence of an intent to eliminate this important historical use. Considered alongside the underlying GTSA narrative, the presumed deficit in NPS grazing management experience and management capacity speaks to an organizational incentive (or intent) to eliminate grazing.

Montrose County sincerely hopes that this process allows for the development of an adequate range of alternatives, and an objective analysis that does not mistakenly define grazing as the sole cause for the range of issues hindering desired conditions across these landscapes. Ideally, this process would recognize the conservation efforts of permittees in this area, and the significant contributions producers can provide when acknowledged as partners. Montrose County hopes this process can facilitate an objective, productive, and respectful discourse, and an outcome that does not achieve desired conditions at the expense of agricultural producers.

# PEPC Project ID: 125241, DocumentID: 138943
# Correspondence: 13

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## Correspondence Text

Livestock grazing in the BLCA and the CURE need to be permanent in the grazing management plan. Permittees need the ability to use equipment (chainsaw, backhoe, trackhoe, etc) for water development and maintenance along with fence and trail maintenance. Trailing livestock through the BLCA and CURE should be permanently available as needed also.

Thank you for your time and consideration.

# PEPC Project ID: 125241, DocumentID: 138943
# Correspondence: 14

## Author Information


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Notes: This correspondence was accompanied by many attachments/references.

## Correspondence Text

SSW is, of course, very interested in bringing livestock grazing that does occur on National Park Service (NPS) lands finally into compliance with NEPA, which was enacted nearly half a century ago, as well as finally bringing this permitted activity into compliance with NPS Policy and other NPS and DOI specific requirements, including the Endangered Species Act. These comments are on behalf of SSW and Jonathan Ratner.

THE NO GRAZING ALTERNATIVE

This issue sits at the very foundation of the planning process.

Let's examine this issue first from the perspective of NEPA and then from the perspective of mandatory versus discretionary use. As you will see from the analysis from both these perspectives, the NPS logic for not analyzing the real no action (no grazing) alternative is specious and unsupportable.

NEPA: NEPA Section 1502.14 c requires agencies to "Include reasonable alternatives not within the jurisdiction of the lead agency." And subsection d. requires the NPS to "Include the alternative of no action."

The CEQ 40 Questions document clarifies the above two requirements, stating:

2b. Must the EIS analyze alternatives outside the jurisdiction or capability of the agency or beyond what Congress has authorized?

A. An alternative that is outside the legal jurisdiction of the lead agency must still be analyzed in the EIS if it is reasonable. A potential conflict with local or federal law does not necessarily render an alternative unreasonable, although such conflicts must be considered. Section 1506.2(d). Alternatives that are outside the scope of what Congress has approved or funded must still be evaluated in the EIS if they are reasonable, because the EIS may serve as the basis for modifying the Congressional approval or funding in light of NEPA's goals and policies. Section 1500.1(a).

3. No-Action Alternative. What does the "no action" alternative include? If an agency is under a court order or legislative command to act, must the EIS address the "no action" alternative?

A. Section 1502.14(d) requires the alternatives analysis in the EIS to "include the alternative of no action." There are two distinct interpretations of "no action" that must be considered, depending on the nature of the proposal being evaluated. The first situation might involve an action such as updating a land management plan where ongoing programs initiated under existing legislation and regulations will continue, even as new plans are developed. In these cases "no action" is "no change" from current management direction or level of management intensity. To construct an alternative that is based on no management at all would be a useless academic exercise. Therefore, the "no action" alternative may be thought of in terms of continuing with the present course of action until that action is changed. Consequently, projected impacts of alternative management schemes would be compared in the EIS to those impacts projected for the existing plan. In this case, alternatives would include management plans of both greater and lesser intensity, especially greater and lesser levels of resource development.

The second interpretation of "no action" is illustrated in instances involving federal decisions on proposals for projects. "No action" in such cases would mean the proposed activity would not take place, and the resulting environmental effects from taking no action would be compared with the effects of permitting the proposed activity or an alternative activity to go forward.

Where a choice of "no action" by the agency would result in predictable actions by others, this consequence of the "no action" alternative should be included in the analysis. For example, if denial of permission to build a railroad to a facility would lead to construction of a road and increased truck traffic, the EIS should analyze this consequence of the "no action" alternative.

In light of the above, it is difficult to think of a situation where it would not be appropriate to address a "no action" alternative. Accordingly, the regulations require the analysis of the no action alternative even if the agency is under a court order or legislative command to act. This analysis provides a benchmark, enabling decisionmakers to compare the magnitude of environmental effects of the action alternatives. It is also an example of a reasonable alternative outside the jurisdiction of the agency which must be analyzed. Section 1502.14(c). See Question 2 above. Inclusion of such an analysis in the EIS is necessary to inform the Congress, the public, and the President as intended by NEPA. Section 1500.1(a).

So obviously, from a NEPA perspective, a no action alternative would be required in this process. But if the clear and unambiguous requirements laid out in the regulations implementing NEPA and the explanation of the regulations by the agency tasked with implementing NEPA were not enough to destroy the argument that a no action alternative is required, let's examine what the NPS, itself, says in the matter of NEPA compliance. Director's Order 12 provides NPS staff direction on fulfilling the NPS's NEPA requirements.

In Section 2.7, the Order states:

A. Range of alternatives

You must examine a full range of alternatives in the analysis documented in either an EIS or an EA. Those alternatives carried forward for analysis must meet project objectives to a large degree, although not necessarily completely. For instance, in the example in section 2.5, you may choose to add an alternative that analyzes using hotels in the town nearest the north rim of the Grand Canyon, even if your project objective was to provide an extended experience for visitors right at the rim. The alternatives must also be developed with environmental resources (rather than cost, e.g.) as the primary determinant. In other words, they propose different means of accomplishing your park's goals, while at the same time protecting or minimizing impacts to some or all resources. Keep in mind that at this stage, the range of options you consider may not ultimately be fully analyzed as "reasonable alternatives," as explained below.

B. Reasonable alternatives

CEQ has defined reasonable alternatives as those that are economically and technically feasible, and that show evidence of common sense (Q2a). Alternatives that could not be implemented if they were chosen, or that do not resolve the need for action and fulfill the stated purpose in taking action to a large degree, should be eliminated as unreasonable before impact analysis begins. Unreasonable alternatives may be those that are unreasonably expensive; that cannot be implemented for technical or logistic reasons; that do not meet park mandates; that are inconsistent with carefully considered, up-to-date park statements of purpose and significance or management objectives; or that have severe environmental impacts -- although none of these factors automatically renders an alternative unreasonable. CEQ is also clear that agencies should not pare the list down to only those alternatives that are cheap, easy, or your park's favorite approach. Rather, feasibility is an initial measure of whether the alternative makes sense and is achievable.

In fact, CEQ has added language cautioning against using even what may seem clear criteria for routinely dismissing alternatives as unreasonable. For instance, if an alternative is any of the following, but otherwise feasible, it must be included in the range of alternatives (Q2b):

-outside the scope of what Congress has approved or funded.
-outside the legal jurisdiction of your park.
-undesirable to an outside applicant but reasonable to the park.
-in conflict with a law.
-outside those alternatives provided for by a GMP or other park planning document (particularly if the plan or policy is older or no longer applicable to the issues the park is now facing (1500.1 (a)).

These conditions often are obstacles to implementing an action, because a law may need to be changed, an applicant may need to modify a proposal, or Congress may need to rethink approval or funding. However, CEQ notes that the EA or the EIS analyzing such alternatives may serve as the vehicle for such change.

Alternatives may also be eliminated as unreasonable as the NEPA process progresses. For instance, if initial impact analysis shows that a technically or economically feasible alternative would have profound adverse environmental impacts, it should be eliminated as "environmentally infeasible."

EAs and EISs should include a section discussing those alternatives that were considered but rejected and briefly explain the reasons for their elimination.

C. No action

The "no action" alternative is developed for two reasons. It is almost always a viable choice in the range of reasonable alternatives, and it sets a baseline of existing impact continued into the future against which to compare impacts of action alternatives. This is important context information in determining the relative magnitude and intensity of impacts (see also, section 4.2(a)). If choosing the true no action alternative (i.e., continuing as is) would violate laws or your park's own policies, you may want to add a "minimum management" alternative to your range. This should not substitute for the no action alternative, because you may lose valuable information on existing impacts by not evaluating the impacts of ongoing activities.

No action for a project -- This would mean the proposed activity would not take place (Q3). Therefore, no action is the continuation of existing conditions and activities without a particular planning context.

Impacts of no action -- The impacts of no action are the impacts of existing activities or conditions (man-made or natural) projected into the future. If the proposal is to modify a plan, the impacts are the impacts of the unmodified plan. The impacts of no action help readers understand whether the project would degrade or improve conditions in an already degraded environment, or in a relatively pristine one. Analysis of no action must also include the cumulative impacts of all past, present, and reasonably foreseeable actions.

If the proposal is to improve existing conditions, the impacts of no action are particularly important to describe, because they help to define the need for NPS action. If implementing the no action alternative would "result in predictable actions by others," this impact should be part of the effects of no action (Q3).

Impacts of no action help decision-makers understand the comparative impacts of proposals, as well as the absolute impact. For instance, if your park is analyzing the impact to wildlife of a proposal to add a trail in an area already covered with trails, the impacts to wildlife of no action (e.g., from hikers using the trails) are distinctly different from the impacts if this were the first trail into a wilderness area. Compared with the existing impacts, a new trail in the first case may have less of an impact than in the second.

Impacts of no action also provide an assessment of absolute, or total, impact to a resource. In the example above, the impacts of the proposed trail, when added to those of existing trails (no action), may impose greater impacts on wildlife than a single trail in a wilderness would.

Accurately and completely describing the impacts of existing sources -- that is, of continuing actions -- is critical to understanding the context, duration and intensity of new impacts. For this reason, a full analysis of no action is required in all NPS EISs and EAs. This is true even when your park is under legislative or other command to take action (Q3). (emphasis added)

Here again it is clear that the NPS's determination that the no action (no grazing) alternative is specious and unsupported by policy, direction and regulation.

The above requirements can be read to include either if the grazing permits are considered mandatory or discretionary. So in either of those cases the NPS's determination is clearly wrong.

Now let's examine whether there is support for the NPS's determination that livestock grazing in BLCA and CURE is mandatory or discretionary.

When the Park was originally created, BLM continued to administer grazing permits within the Park. The Supreme Court, on a number of occasions, has ruled that grazing permits on public lands are revocable licenses and do not convey any right or title. So the permits issued at the creation of the Park and those in place now are revocable permits and do not create and right or title.

The laws establishing the units confirm that any permits within the units are revocable privileges. For the above reasons, an EIS without a no grazing alternative will be legally deficient. Also since grazing permits are short-term authorizations, the current characterization of the proposed action as "no action" alternative is incorrect.

The other foundational issue that must be fully addressed is whether the current permit holders are even legally entitled to permits under the sunset clauses in PUBLIC LAW 106- 76--OCT. 21, 1999 and PUBLIC LAW 108-128--NOV. 17, 2003.

In dealing with the grazing problems on both CARE and DINO, we have found that due to shoddy compliance, permits have been issued to entities who are not legally allowed to hold them.

The record for this process must contain full documentary proof linking current permit holders to the applicable laws. Further, any permits issued without this proof must be immediately revoked and those permits removed from consideration in the Plan.

NPS POLICY AND REQUIREMENTS

NPS Management Policy 2006 forms the foundation on which all activities on NPS lands must conform. The document states:

This volume is the basic Service-wide policy document of the National Park Service. Adherence to policy is mandatory unless specifically waived or modified by the Secretary, the Assistant Secretary, or the Director.

The Policy document further states:

Congress, recognizing that the enjoyment by future generations of the national parks can be ensured only if the superb quality of park resources and values is left unimpaired, has provided that when there is a conflict between conserving resources and values and providing for enjoyment of them, conservation is to be predominant. This is how courts have consistently interpreted the Organic Act. At 11

While commercial livestock grazing is, fortunately, rare in NPS units, the above clearly applies to other uses, including the livestock grazing and trailing under analysis here.

In the Management Policies 2006 at 1.4.3.1, the NPS states:

Park purposes are found in the general laws pertaining to the national park system, as well as the enabling legislation or proclamation establishing each unit. In addition to park purposes, in many cases the enabling legislation or proclamation for a park unit may also identify uses that are either mandated or authorized. In the administration of mandated uses, park managers must allow the use; however, they do have the authority to and must manage and regulate the use to ensure, to the extent possible, that impacts on park resources from that use are acceptable. In the administration of authorized uses, park managers have the discretionary authority to allow and manage the use, provided that the use will not cause impairment or unacceptable impacts.

A plain reading of the legislative history clearly shows that livestock grazing on BLCA and CURE is not a "mandatory use" but an "authorized use" which the NPS may allow or disallow, but you are only permitted to allow the use of livestock grazing "provided that the use will not cause impairment or unacceptable impacts."

In the Management Policies 2006 at 1.4.7, the NPS states:

When an NPS decision-maker becomes aware that an ongoing activity might have led or might be leading to an impairment of park resources or values, he or she must investigate and determine if there is or will be an impairment. This investigation and determination may be made independent of, or as part of, a park planning process undertaken for other purposes. If it is determined that there is, or will be, an impairment, the decision-maker must take appropriate action, to the extent possible within the Service's authorities and available resources, to eliminate the impairment. The action must eliminate the impairment as soon as reasonably possible, taking into consideration the nature, duration, magnitude, and other characteristics of the impacts on park resources and values, as well as the requirements of the National Environmental Policy Act, National Historic Preservation Act, the Administrative Procedure Act, and other applicable laws. (emphasis added)

Again, the NPS policies require you to "investigate and determine" if an activity "might have lead or might be leading to an impairment" yet this has not been done despite years and even decades of data coming in showing that impairment is occurring. Obvious areas where impairment is likely to be occurring would include:

1) Impacts to ESA listed species
2) Impacts to Biological Soil Crust (BSC)
3) Impacts to soils and soil erosion
4) Impacts to vegetation and wildlife
5) Impacts to water resources
6) Impacts to cultural resources
7) Impacts to visitor enjoyment

We will discuss each of these issues in relation to current livestock impacts in a later section.

Let's examine what the NPS's Management Policies 2006 has to say in regard to the management of biological resources:

4.4.1 General Principles for Managing Biological Resources

The National Park Service will maintain as parts of the natural ecosystems of parks all plants and animals native to park ecosystems. The term "plants and animals" refers to all five of the commonly recognized kingdoms of living things and includes such groups as flowering plants, ferns, mosses, lichens, algae, fungi, bacteria, mammals, birds, reptiles, amphibians, fishes, insects, worms, crustaceans, and microscopic plants or animals. The Service will successfully maintain native plants and animals by preserving and restoring the natural abundances, diversities, dynamics, distributions, habitats, and behaviors of native plant and animal populations and the communities and ecosystems in which they occur; restoring native plant and animal populations in parks when they have been extirpated by past human-caused actions; and minimizing human impacts on native plants, animals, populations, communities, and ecosystems, and the processes that sustain them. (emphasis added)

The two critical issues within the above requirement are the definition of "plants and animals" and the definition of how these "plants and animals" are to be managed, which is by 1) by preserving and restoring the natural abundances, diversities, dynamics, distributions, habitats, and behaviors of native plant and animal populations and the communities and ecosystems in which they occur; and 2) minimizing human impacts on native plants, animals, populations, communities, and ecosystems, and the processes that sustain them.

From a biological resources perspective this is the purpose and need for the EIS, and must be at the fore of the purpose and need and at the fore of the alternatives. The preferred alternative must fully comply with the above direction.

It must be noted here that much of the arid west, particularly the BLCA and CURE area did not evolve with large herbivores. So the systems here are not capable of withstanding the massive soil disturbance and resultant loss of BSC that these large, non-native livestock cause. Further, the vegetation did not evolve with significant herbivory as well, so a grazed area will have species that are not tolerant of grazing reduced or eliminated. The requirement to maintain "the natural abundances, diversities, dynamics, distributions, habitats, and behaviors of native plant...populations" can not be met with livestock grazing.

See attached literature on this topic.

Clearly, the above policy requires the preservation and restoration of BSC to its "natural abundances, diversities, dynamics, [and] distributions" yet livestock have functionally eliminated BSC from all grazed areas in the Park.

Again, turning back to the NPS's Management Policies 2006:

1.4.4 The Prohibition on Impairment of Park Resources and Values

While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the National Park Service.

In this case, discretionary livestock grazing are causing a wide range of impacts to Park resources, a number of them clearly fitting the NPS's definition of impairment, yet the discretionary uses continue and nothing in the materials provided by the NPS during scoping would indicate that the NPS is going to correct these impacts under any alternative. Again, the NPS specious determination that livestock grazing is a mandatory use has vitiated the process from its very inception.

The NPS may argue that the permanent degradation of cultural resources or severe impacts to vegetation communities and BSC are not impairment. If so I look forward to critiquing your rationale, in light of the above policies. But even if you can construct some tenuous rationale as to why these impacts are not impairment, your duties go beyond just preventing impairment. The NPS's Management Policies 2006 provide further requirements you must meet:

1.4.7.1 Unacceptable Impacts

The impact threshold at which impairment occurs is not always readily apparent. Therefore, the Service will apply a standard that offers greater assurance that impairment will not occur. The Service will do this by avoiding impacts that it determines to be unacceptable. These are impacts that fall short of impairment, but are still not acceptable within a particular park's environment. Park managers must not allow uses that would cause unacceptable impacts; they must evaluate existing or proposed uses and determine whether the associated impacts on park resources and values are acceptable.

For the purposes of these policies, unacceptable impacts are impacts that, individually or cumulatively, would be inconsistent with a park's purposes or values, or impede the attainment of a park's desired future conditions for natural and cultural resources as identified through the park's planning process, or create an unsafe or unhealthful environment for visitors or employees, or diminish opportunities for current or future generations to enjoy, learn about, or be inspired by park resources or values, or unreasonably interfere with park programs or activities, or an appropriate use, or the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations within the park.

The EIS and its proposed action must fully implement these requirements:

1) Unacceptable impacts must be avoided
2) The NPS must not allow uses that would cause unacceptable impacts
3) The EIS must evaluate livestock grazing and trailing and determine whether the associated impacts on park resources and values are acceptable. The EIS must provide the full rationale as to how it came to its conclusions.
4) The EIS must specify each of the park's purposes and values and analyze and determine that individually and cumulatively whether each of those values and purposes would be impacted by the proposed action and whether the attainment of desired future conditions (see 4.4.1) for natural and cultural resources would be impeded (see definition of impede in Merriam Webster dictionary "to interfere with or slow the progress of")
5) The EIS must analyze whether continued permitting of livestock grazing and trailing would create "unsafe or unhealthful environment for visitors or employees". Note again previous photos of essentially open sewers of cow feces and urine.
6) The EIS must fully analyze whether continued livestock grazing would "diminish opportunities for current or future generations to enjoy, learn about, or be inspired by park resources or values" (see definition of diminish in Merriam Webster dictionary "to make less or cause to appear less")
7) The EIS must fully and honestly analyze whether continued livestock grazing and trailing would "diminish....the atmosphere of peace and tranquility" of the Park

If any aspect of livestock grazing and trailing results in the above impacts, then they are "unacceptable impacts" and therefore the NPS must not allow the "uses that would cause unacceptable impacts".

Regarding archeological resources, the NPS's Management Policies 2006 states:

5.3.5.1.1 Preservation

Archeological resources will be maintained and preserved in a stable condition to prevent degradation and loss. The condition of archeological resources will be documented, regularly monitored, and evaluated against initial baseline data. Parks are encouraged to enlist concerned local citizens in site stewardship programs to patrol and monitor the condition of archeological resources.

5.3.5.1.4 Protection

Archeological resources will be protected against human agents of destruction and deterioration whenever practicable.

The definition of practicable is "capable of being put into practice or of being done or accomplished." Note that the definition does not include political considerations, but is a physical consideration.

Turning back to the fundamental issue that the EIS must address:

8.1.1

In exercising its discretionary authority, the Service will allow only uses that are (1) appropriate to the purpose for which the park was established, and (2) can be sustained without causing unacceptable impacts. Recreational activities and other uses that would impair a park's resources, values, or purposes cannot be allowed. The only exception is when an activity that would cause impairment is directly and specifically mandated by Congress.

The fact that a park use may have an impact does not necessarily mean it will be unacceptable or impair park resources or values for the enjoyment of future generations.

Impacts may affect park resources or values and still be within the limits of the discretionary authority conferred by the Organic Act. In these situations, the Service will ensure that the impacts are unavoidable and cannot be further mitigated. Even when they fall far short of impairment, unacceptable impacts can rapidly lead to impairment and must be avoided. For this reason, the Service will not knowingly authorize a park use that would cause unacceptable impacts.

When a use is authorized by law but not mandated, and when the use may cause unacceptable impacts on park resources or values, the Service will avoid or mitigate the impacts to the point where there will be no unacceptable impacts; or, if necessary, the Service will deny a proposed activity or eliminate an existing activity. (emphasis added)

The EIS and final decision must fully comply with each of the above requirements.
8.1.2 Process for Determining Appropriate Uses

All proposals for park uses will be evaluated for consistency with applicable laws, executive orders, regulations, and policies; consistency with existing plans for public use and resource management; actual and potential effects on park resources and values; total costs to the Service; and whether the public interest will be served.

Superintendents must continually monitor and examine all park uses to ensure that unanticipated and unacceptable impacts do not occur. Superintendents should also be attentive to existing and emerging technologies that might further reduce or eliminate impacts from existing uses allowed in parks. Unless otherwise mandated by statute, only uses that meet the criteria listed in section 8.2 may be allowed.

If, in monitoring a park use, unanticipated impacts become apparent, the superintendent must further manage or constrain the use to minimize the impacts, or discontinue the use if the impacts are unacceptable. (emphasis added)

Let's go through each of these critical requirements individually.

1) The EIS must fully analyze the consistence of the proposed actions with all applicable laws, executive orders, regulations, policy and plans.
2) The EIS must also fully analyze all actual and potential effects on park resources and values.

3) The EIS must disclose total costs of the proposed actions to the Service
4) The EIS must fully and honestly analyze whether the larger public interest will be served by the proposed action in comparison with the no grazing alternative
5) The EIS and ROD must provide a fully funded and staffed monitoring plan to "continually monitor and examine all park uses to ensure that unanticipated and unacceptable impacts do not occur"
6) The EIS must fully analyze whether the proposed actions fully comply with the criteria in the Policies at Section 8.2. If any use proposed does not comply with Section 8.2 they can not be permitted in the ROD
7) The EIS and ROD must implement the requirement that if "unanticipated impacts become apparent, the superintendent must further manage or constrain the use to minimize the impacts, or discontinue the use if the impacts are unacceptable"

The NPS's Management Policies 2006 contain specific direction for "agricultural activities" within NPS lands:

8.6.8.2
Agricultural livestock grazing will use best management practices to protect park resources, with particular attention being given to protecting wetland and riparian areas, sensitive species and their habitats, water quality, and cultural resources. Managers must regulate livestock so that (1) ecosystem dynamics and the composition, condition, and distribution of native plants and animal communities are not significantly altered or otherwise threatened; and (2) cultural values are protected. A comprehensive monitoring program must be implemented, and adaptive management practices must be used to protect park resources.

Again, the EIS must analyze and the ROD must implement actions needed to:
1) Protect all park resources and values
2) Protect wetland and riparian areas
3) Protect Sensitive Species
4) Protect water quality
5) Protect cultural resources
6) Protect "ecosystem dynamics and the composition, condition, and distribution of native plants and animal communities are not significantly altered or otherwise threatened"
7) Implement a comprehensive monitoring program and adaptive management to protect park resources.

I will not take the time to provide a primer on adaptive management but frequently, the federal agencies use 'adaptive management' as an excuse to know nothing and do nothing. Adaptive management is not 'trial and error". It requires properly designed and implemented monitoring, properly defined objectives and clearly defined triggers and actions to be taken if those triggers are exceeded. I have attached two documents on the implementation of adaptive management. While both of these are useful, they are far from a complete practical understanding of adaptive management.

The scoping notice proposes a wide range of actions, nearly Rube Goldbergian, to prop up the unsustainable use of livestock grazing and trailing

8.6.8.2.2 Structures for Agricultural Grazing
Appropriate structures may be approved by the National Park Service and may be allowed in parks when the structures are consistent with a livestock management plan or another appropriate management plan; are consistent with park purposes and other applicable laws, regulations, or policies; and will not cause unacceptable impacts on park resources and values.

4.6.2
Park surface waters or groundwater will be withdrawn for consumptive use only when such withdrawal is absolutely necessary for the use and management of the park.

Current livestock grazing and trailing does not comply with Section 4.6.2.

4.6.3 Water Quality

The pollution of surface waters and groundwaters by both point and nonpoint sources can impair the natural functioning of aquatic and terrestrial ecosystems and diminish the utility of park waters for visitor use and enjoyment. The Service will determine the quality of park surface and groundwater resources and avoid, whenever possible, the pollution of park waters by human activities occurring within and outside the parks. The Service will work with appropriate governmental bodies to obtain the highest possible standards available under the Clean Water Act for the protection for park waters; take all necessary actions to maintain or restore the quality of surface waters and groundwaters within the parks consistent with the Clean Water Act and all other applicable federal, state, and local laws and regulations; (emphasis added)

Many of the livestock accessible surface waters within BLCA and CURE are in a degraded condition based on the NPS's own data, yet no monitoring of water quality or avoidance of pollution has been done by the NPS. The NPS has not taken "all necessary actions to maintain and restore" water quality and the scoping notice does not propose them.

DO-12 requires that in all NEPA processes "it is essential that NPS management decisions (1) be scientifically informed, and (2) insist on resource preservation as the highest of many worthy priorities. (emphasis added)

The NPS will abide by all CEQ NEPA regulations (40 CFR 1500-1508) and any other procedures and requirements imposed by other higher authorities, such as the Department of the Interior (DOI). This Order is not intended, however, to document all those procedures and requirements; for a comprehensive compilation, employees must refer to Handbook 12. (DO-12 at Section 2)

4.1 Sources of NEPA Guidance. The NPS will comply with the substantive and procedural requirements of NEPA, 40 CFR Parts 1500-1508, 43 CFR Part 46, 516 DM, and any additional NPS procedures or instructions regarding NEP A.

4.3 Full and Open Evaluation. The procedures contained in Handbook 12 will ensure that both adverse and beneficial impacts of NPS proposed actions are fully and openly evaluated before actions are taken that may impact the human environment. This evaluation must include provisions for:

-Meaningful participation by the public and other stakeholders;
-Development and critical evaluation of alternative courses of action;
-Rigorous application of scientific and technical information in the planning, evaluation and decision-making processes;
-Use of NPS knowledge and expertise through interdisciplinary teams and processes; and
-Aggressive incorporation of mitigation measures, pollution prevention techniques, and other principles of sustainable park management in all actions.

4.5 NPS management decisions will be based on technical and scientific studies properly considered and appropriate to the decisions made. In making decisions, the NPS will articulate a reasoned connection between the technical and scientific information considered and the final agency action. Technical and scientific information that is essential in making a well-reasoned decision will be obtained even though such information may not be readily available. If such information cannot be obtained due to excessive cost or technical impossibility, the proposed alternative should be modified to eliminate the action causing the unknown or uncertain impact or another alternative may be selected. (emphasis added)

Moving to the related DO-12 Handbook, we wish to highlight the following critical components of the Handbook:

Section B - The processes described in this handbook are binding on all NPS personnel. Under the terms of the National Parks Omnibus Management Act of 1998, the "Secretary shall take such measures as are necessary to assure the full and proper utilization of the results of scientific study for park management decisions. In each case in which an action undertaken by the National Park Service may cause a significant adverse effect on a park resource, the administrative record shall reflect the manner in which unit resource studies have been considered." The development of alternatives, analysis of impacts, and incorporation of the best available information, coupled with identification of environmentally preferable courses of action as called for in this handbook, are one set of steps required in meeting this obligation to the public.

Section 1.2 D - The detailed and scientifically valid study of impacts and alternatives, and appropriate input from the public, must be available before a federal agency makes any commitment of resources.

Unfortunately, the NPS has already made the commitment of resources, but the rest of this requirement must be complied with in the EIS process.

Section 1.4 B - NEPA process must be based on evidence and on sound, repeatable thought processes

Of course, these "repeatable thought processes" must be fully provided in the NEPA document in order for the public to examine them.

Section 1.6 - Always include data on impacts to the park's natural and cultural resources and values that have been specifically recognized in the park's enabling legislation; to interpretive, educational, and recreational opportunities; to resources protected by federal, state, or local laws; and to other relevant resources in your park or region.

Section 2.7 E - As required under CEQ regulations 40 CFR 1502.2(d), NEPA documents must include a section stating how each alternative analyzed in detail would or would not achieve the requirements of sections 101 and 102(1) of NEPA and other environmental laws and policies. In the park service, this requirement is met by 1) disclosing how each alternative, one of which is identified as the environmentally preferred, meets the criteria set forth in section 101(b) of NEPA (see above); and 2) any inconsistencies between the alternatives analyzed in detail and other environmental laws and policies.

Section 2.13 C - Endangered Species Act (ESA)--Section 7 of the ESA requires that a federal agency consult with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service on any action that may affect endangered or threatened species or candidate species, or that may result in adverse modification of critical habitat. An EA or an EIS may provide sufficient information to serve as a biological assessment for section 7 purposes. If a separate biological assessment is prepared, it must be part of any NEPA document.

Executive Orders 11988 and 11990, Floodplain Management and Wetland Protection--These executive orders direct NPS to avoid, to the extent possible, the long- and short-term adverse impacts associated with modifying or occupying floodplains and wetlands. They also require NPS to avoid direct or indirect support of floodplain or wetland development whenever there is a practical alternative. If implementing your park's proposal would result in an adverse impact to a regulated floodplain or wetland, you must include a statement of findings with the finding of no significant impact (FONSI) or the record of decision (ROD).

National Historic Preservation Act (NHPA) section 106--Section 106 of NHPA requires federal agencies to consider the effects of their proposals on historic properties, and to provide state historic preservation officers, tribal historic preservation officers, and, as necessary, the Advisory Council on Historic Preservation a reasonable opportunity to review and comment on these actions. Section 106 review and NEPA are two separate, distinct processes. They can and should occur simultaneously, and documents can be combined, but one is not a substitute for the other. They should, however, be coordinated to avoid duplication of public involvement or other requirements. The information and mitigation gathered as part of the 106 review must be included in the NEPA document, and the 106 process must be completed before a FONSI or an ROD can be signed on a proposal that affects historic properties.

Frequently NEPA documents are more like advertising brochures than analyses. Courts have repeated remanded NEPA documents are merely collections of unsupported conclusory statements.

In disregarding its own policies and failing to measure the potential significance of the effect of grazing, the Forest Service "entirely failed to consider an important aspect of the problem." Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). Its conclusory statements declaring that no significant effect on resources would occur, and therefore that no extraordinary circumstance was present, lack underlying analysis or justification and consequently are insufficient. Sierra Club v. Bosworth, 510 F.3d 1016, 1023, 1028-29 (9th Cir. 2007). Conclusions untethered to any analysis do not merit deference. Id. (Emphasis added) (CV-11-08128-PCT-NVW, D. of AZ)

Because NPS's EA fails to include the requisite cumulative impacts analysis, it cannot be sustained. See Grand Canyon Trust, 290 F.3d at 345; see also Friends of the Earth, Inc. v. United States Army Corps of Engineers, 109 F.Supp.2d 30, 42 (D.D.C.2000) (rejecting EAs containing "no actual analysis," but only a "conclusory statement" that cumulative impacts had been " 'minimal' "); Defenders of Wildlife v. Babbitt, 130 F.Supp.2d 121, 138 (D.D.C.2001) (remanding an EIS "[b]ecause the discussion of cumulative impacts consists only of 'conclusory remarks [and] statements that do not equip a decisionmaker to make an informed decision about alternative courses of action, or a court to review the Secretary's reasoning' ") (quoting Natural Res. Def. Council, Inc. v. Hodel, 865 F.2d 288, 298 (D.C.Cir.1988)). Great Old Broads V. Kemthorne D.D.C.,2006.

These requirements are not satisfied by general statements about possible effects or risks; the agency must take a "hard look" at cumulative impacts or explain why it cannot. Id. "[S]ome quantified or detailed information is required. Without such information, neither the courts nor the public . . . can be assured that the [agency] provided the hard look that it is required to provide." Id. Western Watersheds Project v. Jewell, D. Idaho 2014

We also request that you carefully review the ruling in Northern Plains Resource Council, which we attach to our comments.

Moving back to DO-12 Handbook:

Section 4.5 G 1 - You must support qualitative and quantitative impact analyses with the scientific literature and/or other experts' testimony. Such references should be cited liberally in the impact section. CEQ requires that impacts be quantified as much as possible and described in terms of their context, duration, and intensity

Section 4.5 G 4 - The measurement of impact must be accurate, scientifically credible, and understandable to a lay readership. This is why it is helpful to include a methodology section preceding the impact analysis for each topic. That section can lay out the criteria or thresholds used to draw a conclusion on the context, intensity, and duration of impact. Defining thresholds and impact indicators requires consultation with resource experts, literature searches in some cases, and best professional judgment. In the case of the suspended solids in the river, an impact topic might be the effect of the muddy water on visitor experience. This impact is more difficult to measure than turbidity itself, but not impossible.

Impacts must be quantified as much as possible and interpreted in terms of their context, duration, and intensity. For instance, in the example in section 4.5 (g), the impact is quantified as "suspended solids in the river would increase from its present 10-15 ppm to 1000 ppm for 2-3 weeks during construction." This is adequate for intensity and duration. However, the reader needs a context to understand the full extent and relative importance of the impact. This can be provided by comparing the impact to a relevant standard, such as the state's water quality standards for suspended solids. The methodology section would define the threshold as "any increases in suspended solids that violate the state's water quality standard for this parameter would be considered a 'major' impact." The analysis would follow with "the increase in suspended solids from 10-15 ppm to 1000 ppm is well below the state's water quality standard for this river (3000 ppm)." The analyst should also interpret the quantitative information for a lay audience. In this example, the specialist might conclude, "Because the impact would last only 2-3 weeks and be well below the standard, it would be a minor, short-term adverse impact to water quality."

Notice that criteria were cited (state standards) in the determination of the intensity (in this case, minor) of the impact. Criteria, or thresholds, help to establish the sideboards for understanding the severity and magnitude of the impact. If the analysis simply stated that the suspended solids would increase from 10-15 ppm to 1000 ppm for 2-3 weeks, the public and the decision-maker would be unable to fully understand the extent of the impact.

Mitigation--In an EIS, you must develop and analyze mitigation "even for impacts that by themselves would not be considered significant" (Q19a). All "relevant, reasonable mitigation measures that could improve the project are to be identified," even if they are outside the jurisdiction of the agency (Q19b). You must also analyze the effectiveness of mitigation measures proposed, and the impacts if the project were to proceed without mitigation. For instance, it should be clear whether mitigation is integral to the project and therefore included as part of the alternative, or dependent on factors such as funding or permission from another agency.

Section 4.5 G 7 - You should begin the discussion of impacts by describing methods used to predict impact. As indicated above, if the methods used are the best available, but they require many assumptions that may not be correct or that have been criticized by other professionals, these assumptions should be explained in the methodology section.

This section is also a good place to define or explain how data were interpreted. In other words, you should define terms such as "minor" or "major" for a particular impact topic. If relevant, explain the reasoning behind this interpretation--why, say, 100 ppm is a "major" impact but 50 ppm is a "minor" impact (i.e., your methodology included relevant state water quality standards). This is a discussion of thresholds of impact.

Following the methodology section, you may include a separate section that details relevant laws, regulations, and/or park or other policies for each impact topic. This section may help clarify why a particular impact topic is important to discuss, or help support the reasoning for the impact threshold discussion in the methodology section. This section may be placed in the alternatives or purpose and need chapter if more appropriate.

DO - 11B also provides important and applicable requirements that the NPS must comply with.

A. Reliable Data. The National Park Service will ensure that information it releases will be developed from reliable data sources and will otherwise ensure information quality at each stage of information development. The NPS's methods for producing quality information will be made transparent, to the maximum extent practicable, through accurate documentation, use of appropriate internal and external review procedures, consultation with experts and users, and verification of the quality of the information disseminated to the public. The NPS will also keep users informed about corrections and revisions.

Information will be developed only from reliable data sources based on accepted practices and policies utilizing accepted methods for information collection and verification. It will be reproducible to the extent possible. Influential information will be produced with a high degree of transparency about data and methods. The information should include all pertinent information to allow the public to understand the park's legislative authorities, mission, activities, organization, strategic plan, performance plan, and performance accomplishments.

D. Third Party Information Under the Guidelines. If NPS relies upon technical, scientific, or economic information submitted or developed by a third party, that information is subject to the appropriate standards of objectivity and utility. These standards of these guidelines apply not only to information that NPS generates, but also to information that other parties provide to NPS, if NPS disseminates or relies upon this information.

IV A. Information Approval. All information disseminated to the public must be approved by the appropriate program and/or regional office prior to its dissemination and must satisfy OMB and Departmental guidelines. The approval process will include documentation of the specific information quality standards used in producing the information in a way to substantiate the quality, utility, objectivity, and integrity of the information in a manner that conforms to OMB and Departmental guidelines.

Please review and apply the requirements provided in Interim Guidance Document Governing Code of Conduct, Peer Review, and Information Quality Correction for National Park Service Cultural and Natural Resource Disciplines.

The National Parks Omnibus Management Act of 1998 specifically requires:

SEC. 206. INTEGRATION OF STUDY RESULTS INTO MANAGEMENT DECISIONS.

The Secretary shall take such measures as are necessary to assure the full and proper utilization of the results of scientific study for park management decisions. In each case in which an action undertaken by the National Park Service may cause a significant adverse effect on a park resource, the administrative record shall reflect the manner in which unit resource studies have been considered.

The trend in the condition of resources of the National Park System shall be a significant factor in the annual performance evaluation of each superintendent of a unit of the National Park System.

The NPS's Management Policies 2006 echo and elaborate on the requirements to base management on best available science:

2.1.2 Scientific, Technical, and Scholarly Analysis

Decision-makers and planners will use the best available scientific and technical information and scholarly analysis to identify appropriate management actions for protection and use of park resources.

2.3.1.4 Science and Scholarship

Decisions documented in general management plans and other planning products, including environmental analyses and documentation, will be based on current scientific and scholarly understanding of park ecosystems and cultural contexts and the socioeconomic environment both internal and external to the park. The collection and analysis of information about park resources will be a continuous process that will help ensure that decisions are consistent with park purposes.

Since the units were created there has been significant problems with trespass livestock, with resultant significant degradation to Park resources and values The NPS's approach to dealing with this constant and repeated trespass has been woefully inadequate and ineffective. The EIS needs to address this failure and implement clear and punitive actions to avoid promoting and rewarding trespass as is the case now. In such cases the NPS needs to implement actions under DO - 14 and its handbook as part of all action alternatives.

DO - 41 provides requirements for the management of Wilderness and proposed Wilderness. The majority of the project area is proposed Wilderness. Please review the entire contents of DO - 41 and apply it to the EIS process. We will not reiterate all important requirements here, but only highlight a few:

6.4 Minimum Requirements

Parks must complete a "minimum requirements analysis" (MRA) in order to document the determination of whether a proposed action (project), which involves a prohibited use, is necessary to meet minimum requirements for the administration of the area for the purpose of wilderness. The Wilderness Act in Section 4 (c) identifies the prohibitions (codified at 16 U.S.C. 1133(c)) and Section 2 describes the purpose of wilderness (codified at 16 U.S.C. 1131).

Parks must first determine if the action (project) is necessary for the administration of the wilderness area, to realize the purpose of wilderness. Once the action (project) is determined necessary, parks must next determine the activity (method or tool) to accomplish the action (project) with the least negative impact to wilderness. This MRA should be undertaken using an interdisciplinary approach that includes the project lead, wilderness manager, resource specialists, and superintendent. NPS Management Policies provide that a MRA must also be applied to all other administrative actions (projects) within wilderness that could potentially affect wilderness character. Also, whenever an environmental assessment or environmental impact statement is prepared for work projects within wilderness, a MRA should be included as part of the document.

Under no circumstances may a MRA be used to allow permanent roads or commercial enterprise within wilderness. The use of motorized equipment and the establishment of management facilities are specifically prohibited when other reasonable alternatives are available.

Section 6 of Reference Manual 41 also must be implemented in the EIS and ROD.

The EIS and its analyses must also comply with DO - 79 and 305 DM 3.

The EIS and its analyses must also comply with DO - 77 - 1. We provide a copy with critical sections that must be fully complied with highlighted.

Manual 75 provides direction for the development and implementation of monitoring and assessment. A full monitoring plan must be developed and included in the DEIS. Implementation of it must be fully funded and mandatory.

NPS Manual 75 requires that you maintain a comprehensive monitoring program:

NPS policy requires that park managers know the nature and condition of the natural resources under their stewardship, have the means to detect and document changes in those resources, and understand the forces driving the changes, in order to fulfill the NPS mission of conserving parks unimpaired.

During the previous decades of permitting livestock grazing and trialing on BLCA and CURE, the NPS has ignored this requirement. This failure needs to be discussed in the EIS and a clear framework and requirements so this failure can not happen again. Most of the rest of the resources impacted by livestock grazing and trailing, the NPS has little to no data on and has done nothing those impacts. The NPS is essentially flying blind.

Page 6 of this Manual clearly delineates your duties regarding monitoring of NPS resources:

Superintendents are responsible for setting local policy and priorities. They direct and integrate the efforts of research scientists, resource specialists, park rangers, and other park staff to assure perpetuation of unimpaired park resources. They focus the park staff's attention on critical issues, formulate strategic and tactical plans, and set priorities for fiscal resources. They are ultimately responsible both for knowing the condition of park resources and for directing efforts to sustain them.

Again, BLCA and CURE has failed to implement this direction.

Moving back to the NPS's Management Policies 2006:

The Senate committee report stated that under the Redwood amendment, "The Secretary has an absolute duty, which is not to be compromised, to fulfill the mandate of the 1916 Act to take whatever actions and seek whatever relief as will safeguard the units of the national park system."

Either from the perspective of archeological resources or vegetative or ESA listed species or riparian conditions or other natural resources, the NPS's current authorization of livestock grazing, and its failure to require compliance with NPS policies, is a derogation of your duties as well as a violation of the Organic Act and the Redwoods Act. This failure needs to be clearly and effectively corrected in the EIS and ROD.

This is echoed in the Management Policies 2006:

1.4.3 The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. This mandate is independent of the separate prohibition on impairment and applies all the time with respect to all park resources and values, even when there is no risk that any park resources or values may be impaired. NPS managers must always seek ways to avoid, or to minimize to the greatest extent practicable, adverse impacts on park resources and values.(emphasis added)

Of particular note above is the clear mandate separate and independent of the prohibition on impairment, the mandate to conserve park resources and values. The above requires the NPS to "always seek ways to avoid, or to minimize to the greatest extent practicable, adverse impacts on park resources and values." The NPS authorized actions must avoid or minimize to the greatest extent practicable all adverse impacts.

The NPS's Management Policies 2006 clearly state at 2.3.1.1:

2.3.1.1 Statutory Requirements

General management plans will meet all statutory requirements contained in 16 USC 1a-7(b) and will include the types of management actions required for the preservation of park resources;

The current GMP does not contain the actions required for the preservation of park resources from the impacts of livestock grazing and trailing. The GMP needs to be amended to provide specific and enforceable requirements and limitation to deal with the wide range of impacts from these non-native, private livestock within the park.

Moving back to the NPS's Management Policies 2006:

2.1.4 Goal Orientation

Managers will be held accountable for identifying and accomplishing measurable long-term goals and annual goals that are incremental steps to carrying out the park mission. Such planning is a critical and essential part of the NPS performance management system that is designed to improve the Park Service's performance and results. Park staff will monitor resource conditions and visitor experiences and plan, track, and report performance. If goals are not being met, managers will seek to understand why and take appropriate action. The goals will be periodically reassessed, taking into account new knowledge or previously unforeseen circumstances, and then the planning cycle will be reinitiated at the appropriate point.

While this requirement was not implemented in the GMP, it must be implemented in this EIS and ROD.

In Section 2.1.2:

the Park Service will identify reasonable alternatives and analyze and compare their differences with respect to

-consistency with the park's purpose,
-the quality of visitor experiences,
-the impacts on park resources,
-short- and long-term costs, and
-environmental consequences that may extend beyond park boundaries.

In Section 4.1:

The Service will not intervene in natural biological or physical processes, except

-when directed by Congress;
-in emergencies in which human life and property are at stake;
-to restore natural ecosystem functioning that has been
-disrupted by past or ongoing human activities; or
-when a park plan has identified the intervention as necessary to protect other park resources, human health and safety, or facilities.

The permitting of livestock grazing clearly intervenes with natural biological and physical processes. Taking just the example of biological soil crust (BSC), which is a foundational component of the ecosystem. Where livestock grazing takes place BSC is functionally eliminated. None of the exception above apply.

In Section 4.1.1:

4.1.1 Planning for Natural Resource Management

Each park with a significant natural resource base (as exemplified by participation in the Vital Signs component of the Natural Resource Challenge) will prepare and periodically update a long-range (looking at least one to two decades ahead) comprehensive strategy for natural resource management. This long-range strategy will describe the comprehensive program of activities needed to achieve the desired future conditions for the park's natural resources. It will integrate the best available science and prescribe activities such as inventories, research, monitoring, restoration, mitigation, protection, education, and management of resource uses. The strategy will also describe the natural-resource-related activities needed to achieve desired future conditions for cultural resources (such as historic landscapes) and visitor enjoyment. Similarly, planning for park operations, development, and management activities that might affect natural resources will be guided by high-quality, scientifically acceptable information, data, and impact assessment. Where existing information is inadequate, the collection of new information and data may be required before decision-making. Long-term research or monitoring may also be necessary to correctly understand the effects of management actions on natural resources whose function and significance are not clearly understood.

This Natural Resource Management Plan appears to have never been written, yet it should form the basis of this EIS process. Neither the desired future conditions have been defined nor have actions needed to achieve them been set forth.

4.1.5 Restoration of Natural Systems

The Service will reestablish natural functions and processes in parks unless otherwise directed by Congress. Landscapes disturbed by natural phenomena, such as landslides, earthquakes, floods, hurricanes, tornadoes, and fires, will be allowed to recover naturally unless manipulation is necessary to protect other park resources, developments, or employee and public safety. Impacts on natural systems resulting from human disturbances include the introduction of exotic species; the contamination of air, water, and soil; changes to hydrologic patterns and sediment transport; the acceleration of erosion and sedimentation; and the disruption of natural processes. The Service will seek to return such disturbed areas to the natural conditions and processes characteristic of the ecological zone in which the damaged resources are situated. The Service will use the best available technology, within available resources, to restore the biological and physical components of these systems, accelerating both their recovery and the recovery of landscape and biological community structure and function. Efforts may include, for example

-removal of exotic species
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-facilities

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-removal of exotic species
-removal of contaminants and nonhistoric structures or
-facilities
-restoration of abandoned mineral lands, abandoned or unauthorized roads, areas overgrazed by domestic animals, or disrupted natural waterways and/or shoreline processes
-restoration of areas disturbed by NPS administrative, management, or development activities (such as hazard tree removal, construction, or sand and gravel extraction) or by public use
-restoration of natural soundscapes
-restoration of native plants and animals
-restoration of natural visibility

The EIS and ROD must fully implement this requirement.

4.1.6 Compensation for Injuries to Natural Resources

The Service will use all legal authorities that are available to protect and restore natural resources and the environmental benefits they provide when actions of another party cause the destruction or loss of, or injury to, park resources or values. As a first step, damage assessments provide the basis for determining the restoration and compensation needs that address the public's loss and are a key milestone toward the ultimate goal, which is restoration, replacement, and/or reclamation of resources for the American public.

Pursuant to applicable provisions of the Comprehensive Environmental Response, Compensation and Liability Act of 1980; the Oil Pollution Act of 1990; the Federal Water Pollution Control Act (as amended by the Clean Water Act of 1977); and the National Park System Resource Protection Act, the Service will
-determine the injury caused to natural resources, assess all appropriate damages, and monitor damages;
-seek to recover all appropriate costs associated with responses to such actions and the costs of assessing resource damages, including the direct and indirect costs of response, restoration, and monitoring activities; and
-use all sums recovered in compensation for resource injuries to restore, replace, or acquire the equivalent of the resources that were the subject of the action.

As stated previously, the NPS has failed to comply with this requirement in regards to damages caused by authorized or trespass livestock. These requirements must be implemented as actions common to all alternatives.

4.4.2.1 NPS Actions That Remove Native Plants and Animals

Whenever the Service removes native plants or animals, manages plant or animal populations to reduce their sizes, or allows others to remove plants or animals for an authorized purpose, the Service will seek to ensure that such removals will not cause unacceptable impacts on native resources, natural processes, or other park resources. (emphasis added)

This requirement must be implemented in the EIS and ROD.

4.4.2.3 Management of Threatened or Endangered Plants and Animals

The Service will survey for, protect, and strive to recover all species native to national park system units that are listed under the Endangered Species Act. The Service will fully meet its obligations under the NPS Organic Act and the Endangered Species Act to both proactively conserve listed species and prevent detrimental effects on these species. To meet these obligations, the Service will:

-cooperate with both the U.S. Fish and Wildlife Service and the NOAA Fisheries to ensure that NPS actions comply with both the written requirements and the spirit of the Endangered Species Act. This cooperation should include the full range of activities associated with the Endangered Species Act, including consultation, conferencing, informal discussions, and securing all necessary scientific and/or recovery permits;
-undertake active management programs to inventory, monitor, restore, and maintain listed species' habitats; control detrimental nonnative species; manage detrimental visitor access; and reestablish extirpated populations as necessary to maintain the species and the habitats upon which they depend;
-manage designated critical habitat, essential habitat, and recovery areas to maintain and enhance their value for the recovery of threatened and endangered species;
-cooperate with other agencies to ensure that the delineation of critical habitat, essential habitat, and/or recovery areas on park-managed lands provides needed conservation benefits to the total recovery efforts being conducted by all the participating agencies;
-participate in the recovery planning process, including the provision of members on recovery teams and recovery implementation teams where appropriate;
-cooperate with other agencies, states, and private entities to promote candidate conservation agreements aimed at precluding the need to list species; and

-conduct actions and allocate funding to address endangered, threatened, proposed, and candidate species.

The National Park Service will inventory, monitor, and manage state and locally listed species in a manner similar to its treatment of federally listed species to the greatest extent possible. In addition, the Service will inventory other native species that are of special management concern to parks (such as rare, declining, sensitive, or unique species and their habitats) and will manage them to maintain their natural distribution and abundance.

This requirement must be implemented in the EIS and ROD.

-Section 4.6.6 - The Service will protect watershed and stream features primarily by avoiding impacts on watershed and riparian vegetation and by allowing natural fluvial processes to proceed unimpeded.

-Section 5.2 - To gain this understanding, the Service must obtain baseline data on the nature and types of cultural resources, and their (1) distribution; (2) condition; (3) significance; and (4) local, regional, and national contexts.

-Superintendents will ensure full consideration of the park's cultural resources and values in all proposals for operations, development, and natural resource programs, including the management of wilderness areas. When proposed undertakings may adversely affect national historic sites, national battlefields, and other predominantly cultural units of the national park system that were established in recognition of their national historical significance, superintendents will provide opportunities for the same level of review and consideration by the Advisory Council on Historic Preservation and the Secretary of the Interior that the Advisory Council's regulations require for undertakings that may adversely affect national historic landmarks (36 CFR 800.10).

Section 5.2.1 - Each superintendent will consult with outside parties having an interest in the park's cultural resources or in proposed NPS actions that might affect those resources, and provide them with opportunities to learn about and comment on those resources and planned actions.

Consultations on proposed NPS actions will take place as soon as practical and in an appropriate forum that ensures, to the maximum extent possible, effective communication and the identification of mutually acceptable alternatives. The Service will establish and maintain continuing relationships with outside parties to facilitate future collaboration, formal consultations, and the ongoing informal exchange of views and information on cultural resource matters.

5.3.5.1.1 Preservation

Archeological resources will be maintained and preserved in a stable condition to prevent degradation and loss. The condition of archeological resources will be documented, regularly monitored, and evaluated against initial baseline data.

In accordance with 8.2.3.1 permittees are not allowed to use motorized vehicles off designated roads. This requirement must be common to all alternatives.

The proposed permitted livestock grazing and trailing falls under the definition of special park uses in 8.6.1.

Further, 8.6.1.1 requires:

A superintendent must deny initial requests or requests for renewal upon finding that the proposed activity would cause unacceptable impacts. The superintendent likewise must terminate previously authorized special park uses based on such a finding. (emphasis added)

Note that the above is non-discretionary and the trigger is not impairment but simply "unacceptable impacts" which we have discussed in previous sections.

Another requirement that has been conveniently ignored by the NPS is:

8.6.1.2 Fees

Cost recovery and performance bond and liability insurance requirements will be imposed, consistent with applicable statutory authorities and regulations. All costs incurred by the Service in receiving, writing, and issuing the permit, monitoring the permitted use, restoring park areas, or otherwise supporting a special park use may be paid by the permittee. The money will be retained by the park as reimbursement.

When appropriate, the Service will also collect a fee for the
use of the land or facility based on a market evaluation. Fees collected for use of the land or facility will be deposited into the U.S. Treasury. (emphasis added)

The NPS has ignored this requirement, but it must be included as common to all alternatives. The Cost of this EIS process must also be included.

8.6.8.2.1 Permitting Agricultural Grazing

Agricultural livestock activities by parties other than the Park Service will be conducted only pursuant to the terms and conditions of a special use permit or lease. The use of a lease is appropriate only when (1) specifi cally authorized by the park's enabling legislation, or (2) it is part of an historic preservation program authorized by 16 USC 470h-3, or (3) the livestock use is associated with a building that is leased pursuant to 16 USC 1a-2(k).

In addition to any other penalty provisions, violation of the terms and conditions of the permitting instrument may result in revocation of the livestock use privilege.

8.6.8.2.2 Structures for Agricultural Grazing

Appropriate structures may be approved by the National Park Service and may be allowed in parks when the structures
-are consistent with a livestock management plan or another appropriate management plan;
-are consistent with park purposes and other applicable laws, regulations, or policies; and
-will not cause unacceptable impacts on park resources and values.

The Service will not expend funds to construct or maintain livestock structures unless there is a direct benefit to the protection of park resources.

The following requirement must be implemented in all alternatives

8.6.8.3 Trespass and Feral Livestock

Livestock trespassing on park lands may be impounded and disposed of pursuant to the provisions of 36 CFR 2.60, with the owner charged for expenses incurred. Wild living or feral livestock having no known owner may also be disposed of in accordance with 36 CFR 2.60.

A fundamental aspect of NEPA is to take a "hard look" at current management, conditions, assumptions and implementation. A NEPA document that fails to analyze the following violates the purposes of NEPA:
1) Validity of assumptions from previous NEPA processes
2) Accuracy of predictions from previous NEPA processes
3) Adequacy of NPS implementation of previous decisions
4) Permittee compliance with permit terms and conditions, AMP's, AOIs and other requirements
5) effectiveness of actions taken in previous decisions

These above items are absolutely critical to be part of this NEPA process. Without this critical link the validity of the current assumptions are baseless. Let's look at each one of these individually. Without analyzing the accuracy and validity of the assumptions used in previous NEPA processes one has no way to judge the accuracy and effectiveness of the current analysis and proposals. This vitiates the NEPA process. For instance, the EIS for the GMP predicted only minor impacts from grazing and trailing and assumed certain actions and planning would take place. Those assumptions were incorrect. The predictions made in previous NEPA processes also need to be disclosed and analyzed because if the accuracy was not there, most likely you are making the same predictions in the current process and thus the current process again will be vitiated.

A review of the adequacy of the NPS's implementation of current permits and NPS Policy and GMP direction is essential to a valid NEPA process. For instance, if in previous processes, the NPS said they were going to do a certain monitoring plan or implement a certain type of management and these were never effectively implemented, that is incredibly important for the reader and the decision maker to know. If there have been problems with the NPS's implementation in the past, it is not logical to assume that implementation will now all of a sudden be complaint.

Another critical component is permittee compliance. If the permittee has failed to properly comply with their permit terms and conditions and Policy requirements, including utilization requirements, rotation requirements and fence maintenance then it is absolutely critical to discuss this in the document and its effects on the proposed action. Permittee failure to comply with permit terms and conditions and other requirements shows two things, firstly that the permittee has failed to implement even the minimal standards that are currently in place and secondly, it shows that the NPS has failed to take decisive permit action to ensure compliance. Both of these are very important aspects that must be discussed for a valid NEPA process.

Another critical component is an examination of the effectiveness of the current permits and related actions. A classic example of this is fences and water developments. Often, new fences and water developments are proposed to solve riparian issues in spite of the fact that these have been used for many decades without correcting riparian issues. Doing more of the same does not lead to good results is not an effective strategy for public lands management.

With the previous non-exhaustive review of some of the requirements that must be implemented by the NPS in all action alternatives, we now move other considerations.

FORAGE AVAILABILITY

Foundational to any consideration of grazing permits is the actual amount of forage available to livestock. The NPS must analyze, in a site-specific way, the capability of these allotments to provide forage for livestock. This analysis needs to assess the need for vegetative and BSC recovery, the availability of forage, the distances to water, and slopes not to exceed a certain limit depending on soil types. Forage produced on highly erosive soils must be removed from consideration.

Utilization limits (harvest coefficient) that meets all the requirements discussed in the section regarding NPS Policy as well as the physiological needs of the vegetation, while allowing for BSC to recover and fully play its ecological role, must also be factored in.

In addition, the NPS further subtract from the available forage, the forage and cover needs of wildlife. As stated above, the NPS must provide for compliance with 4.4.1:

The Service will successfully maintain native plants and animals by preserving and restoring the natural abundances, diversities, dynamics, distributions, habitats, and behaviors of native plant and animal populations and the communities and ecosystems in which they occur;

for all plant and animal species, not just the hunted variety. So forage and cover for voles and other small mammals as well as insects and reptiles must also be provided for.

While the Forest Service is a multiple-use agency and the NPS is not, we provide examples of capability analysis processes by both R4 and R2. Of course, these fail to factor in issues other than production, slope, soils and distance from water.

We provide a science-based process for this process in Catlin et al. 2003.

While Catlin et al. provides some information regarding utilization rates we request that you review Range Management - Principles and Practice, which is the primary range management textbook. While the textbook is for livestock management maximization (not NPS requirements). This textbook recommends a maximum utilization rate of 25% and summarizes the literature by stating "use of a harvest coefficient higher than 25% invariably leads to land degradation".

The NPS can not simply rubber stamp the AUM's authorized by the other agencies more than half a century ago. The NPS must determine available forage while complying with all the above requirements.

Rubber stamping AUM's from ancient permits would clearly be arbitrary and capricious decision making, in violation of the Administrative Procedures Act.

THE AUM AND LIVESTOCK WEIGHTS

Further underscoring the need to properly determine available forage is the fact that the current permits allocations were set nearly half a century ago, back when high levels of utilization were considered fine. In addition, livestock weights have dramatically increased over this time period, resulting in the removal of significantly more forage by the same number of livestock.

We attach Carter, 2008 for details on this issue. In summarizing the issue, Carter states:
Applying this to the current weight of 1,680 pounds for a cow/calf pair, the daily forage consumption would be 50.4 lbs of air-dry forage per day, or for a month (30.4 days), 1532 pounds of forage per

AUM.

When the permits we issued, the BLM was using 790 lbs. of forage per AUM, yet current consumption is approximately twice that. So in other words, the current permits result in the removal of approximately twice the total biomass than occurred when the AUM allocation was set.

Clearly, if the NPS issues permits for the same number of AUM's and same numbers of livestock, the decision will be arbitrary and capricious.

SEASON

The current permits are based on profit maximization and permittee wishes. There is no mandate for the NPS to align any permits issued with those issues by other agencies.

We also provide Painter, 2006 Herbivory Review as an additional resource.

Don't be fooled into thinking that winter grazing has no impacts on both vegetation or BSC. To quote Hudak, 2013 (attached):

There is no right way to do a wrong thing. It is impossible to commercially graze domestic livestock on public lands without significantly degrading many public values.

We provide a number of papers for your review on this matter.

THE ECOSYSTEM DID NOT EVOLVE WITH LIVESTOCK

Cattle are a large non-native herbivore of which there was no analogous species since at least the last ice age.

Carter et al., 2014 Holistic Management: Misinformation on the Science of Grazed Ecosystems provides a review of this issue in Section 2. We request that you also review the literature cited in this section. The paper concludes:

Western US ecosystems outside the prairies in which bison occurred are not adapted to the impact of large herds of livestock.

We also provide the classic Mack and Thompson, 1982 paper.

The basic incompatibility of livestock grazing with the ecosystems of the arid west must be fully acknowledged and the final decision must deal with this fact.

BIOLOGICAL SOIL CRUST

BSC, while playing a foundational ecosystem role on BLCA and CURE has essentially been ignored by the NPS. Little research has been done on BSC or its potential within the park and no management requirements or limitations have been implemented in relation to the NPS's authorization of livestock grazing and trailing.

We provide as attachments ten papers regarding BSC and its management with clear implications for the EIS and ROD.

Again, failure to implement the management implications of this mass of literature will result in a decision that is arbitrary and capricious.

Given the foundational nature of BSC, we request that you set up a project with Matt Bowker who did extensive BSC research and modeling work in the adjacent Grand Staircase Escalante National Monument to conduct a similar process on CARE so that not only can you determine departure from the reference state, but can also set measurable objectives and requirements in the permits. For instance, if crust coverage in the reference state is 70% and current coverage is 2%, then permit requirements need to include such actions as major reductions in livestock numbers and time until recovery occurs. While all grazing is destructive to BSC, certain conditions are somewhat less destructive, so requirements need to also be put in place to put any grazing to that time period.

THE ALTERNATIVE

Nearly everything we have discussed in these comments would need to be implemented as common to all alternatives, but at a minimum, the preferred alternative must incorporate all of the NPS Policy and direction we have discussed above. In addition, because you are mandated to plan and manage based on the best available science, the preferred alternative must set stocking rates based off a science-based process such as Catlin et al, 2003 that also explicitly factors in NPS Policies 4.4.1, which was not done in Catlin. The preferred alternative must also implement a science-based, performance-based, accountability-based framework to avoid the failures of the past, where permittees have severely degraded park resources and values with no repercussions.

We request consulting party status for NHPA compliance.

We would like to set up a meeting with you to discuss the contents of our comments as well as the literature we are providing. Could you let us know when you have had a chance to review this material?

Sincerely yours,

[redacted]