

National Park Service
US Department of the Interior



Capitol Reef National Park

Public Scoping Comment Analysis Report

Livestock Grazing and Trailing Management Plan / Environmental Impact Statement for Capitol Reef National Park

September 2015



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Introduction and Guide

Introduction

On March 10, 2015, Capitol Reef National Park (CRNP) released a public scoping newsletter for the Livestock Grazing and Trailing Management Plan/Environmental Impact Statement (EIS). The public scoping newsletter described the background, purpose, need, and objectives of the plan, preliminary management practices and tools, resource impact topics, and the planning process. A 60-day public comment period was open from March 10 to May 15, 2015 for the public to submit comments on the scope of the planning process and preliminary management practices and tools. This public comment period was announced in the *Federal Register* (Volume 80, Number 50), a press release was posted on CRNP's website (<http://www.nps.gov/care/learn/news/newsreleases.htm>), Facebook page (www.facebook.com/nationalparkservice), and twitter page (www.twitter.com/natl parkservice), and through posting of the newsletter on the National Park Services (NPS) Planning, Environment, and Public Comment (PEPC) system (http://parkplanning.nps.gov/care_lgtmp_eis_scoping).

During the scoping period, public scoping open houses were held at the Wayne County Community Center on April 1, 2015 and the Hanksville Town Hall on April 2, 2015. A total of 44 participants attended the meetings. In addition, one online "webinar" was held on April 8, 2015. The open house meetings had several stations presenting different aspects of the project. The NPS staff were at the stations to answer questions and provide additional information. The online webinar presented information about the planning process and development of the plan followed by a question and answer session. All public scoping meeting materials were posted on PEPC.

Comment forms were available at the sign-in table for participants to complete and submit at the open houses or mail them to CRNP any time during the public comment period. Those attending the open houses were also given a frequently asked questions handout regarding the project. During the scoping period about 40 pieces of correspondence were entered into PEPC either from direct entry by the commenter, or uploading of emails, letters, and comment forms by the NPS contractor.

Nature of the Comments Received

About 40 pieces of correspondence were received during the 60-day scoping period from 10 states with over 60 percent received from the state of Utah. The topics that received the majority of comments were concerns regarding natural resource issues and suggestions for livestock grazing and trailing management practices and tools.

All comments, regardless of how they were submitted and the topic, were read and analyzed, and are summarized in this report. Commenters will continue to be notified of the project's progress and are encouraged to visit the planning website at http://parkplanning.nps.gov/care_lgtmp_eis to view information pertaining to this project.

The Comment Analysis Process

Comment analysis is a process used to compile and correlate similar public comments into a format that can be used by decision makers and the Livestock Grazing and Trailing Management Plan/EIS Team. Comment analysis assists the team in organizing, clarifying, and addressing technical information pursuant to National Environmental Policy Act (NEPA) regulations. It also helps to identify the topics and issues to be evaluated and considered throughout the planning process.

The process includes five components:

- Developing a coding structure
- Employing a comment database for comment management
- Reading and coding public comments
- Interpreting and analyzing the comments to identify issues and themes
- Preparing a comment summary

A coding structure was developed to identify general content of a comment and to group similar comments together. A total of 14 codes were used to categorize comments received during the public scoping period for the Livestock Grazing and Trailing Management Plan/EIS. The coding structure was derived from an analysis of the range of topics from the comments received and discussed during public scoping. The coding structure was designed to capture all comment content rather than to restrict or exclude any ideas.

The NPS PEPC database was used to manage and store the full text of all correspondence and to code each comment by topic. Outputs from the NPS PEPC database include the total number of comments and correspondences, correspondence by state, and correspondence by codes and organization type.

Analysis of the public comments involved the assignment of codes to statements from the letters, email messages, and written comment forms.

The analysis process attempts to capture the full range of public concerns, however, this content analysis report should be used with caution. Comments received from people who chose to respond may not represent the sentiments of the entire public. Furthermore, this was not a vote-counting process, and the emphasis was on the content rather than the number of times a comment was received. While all comments were read, some comments received were non-substantive (e.g., they were simply in favor of or against the proposed action or alternatives, or agreed or disagreed with NPS policy), and only substantive comments received will be considered as the EIS process continues.

Definition of Terms

Terms used in this document are defined below.

Correspondence—A correspondence is the entire document received from a commenter. It can be in the form of a letter, email, or open house comment form.

Comment—A comment is a portion of the text within a correspondence that addresses a single topic. It may include information such as an expression of support or opposition of livestock grazing and trailing, additional data regarding the existing condition, or an opinion debating the alternatives to be analyzed.

Code—A grouping centered on a common topic. The codes were developed during the public scoping process and are used to track primary subjects throughout the EIS process.

Concern—A concern statement is a written summary of all comments received under a particular code. Some codes were separated into more than one concern statement to provide better focus on the content of comments received.

Guide to This Document

This report is organized as follows:

Content Analysis Report—This is the basic report produced from PEPC that provides information on the numbers and types of comments received, organized by code and by various demographics. The first section is a summary of the number of comments that fall under each code or topic. Data are then presented on the correspondence by type (i.e., amount of faxes, emails, letters, etc.); amount received by organization type (i.e., organizations, governments, individuals, etc.); and amount received by state.

Public Scoping Comment Summary—This report summarizes the comments received during the public scoping process. These comments are organized by codes and further organized into concern statements. Representative quotes taken directly from the text of the comments are then provided for each concern statement. Representative quotes further clarify the concern statements.

Correspondence List—This appendix provides a cross-reference list of the unique tracking number assigned to each piece of correspondence and the corresponding commenter name and/or organization.

Index by Organization Type—This appendix provides a listing of all groups that submitted comments, arranged and grouped by the following organization types (and in this order): conservation/preservation groups; federal government; recreational groups; state government; tribal government; and unaffiliated individuals. The commenters or authors are listed alphabetically, along with their correspondence number and the codes that their comments fell under, organized under the various organization types. Correspondence identified as N/A represents unaffiliated individuals.

Index by Code—This index lists which commenters or authors (identified by organization type) commented on which topics, as identified by the codes used in this analysis. The report is organized by code, and under each code is a list of the authors who submitted comments for that code and their correspondence number. Those correspondences identified as N/A represent unaffiliated individuals.

Content Analysis Report

Comment Distribution by Code

(Note: Each comment may have multiple codes. As a result, the total number of comments may be different from the actual number of comment totals)

Code	Description	Number of Comments
AE24000	Affected Environment Water Resources	1
AL2000	Alternatives: Alternatives Eliminated	6
AL4000	Alternatives: New Alternatives Or Elements	97
GC 1000	Opposed To Continuation Of Livestock Grazing And Trailing On Capitol Reef National Park	7
GC 2000	Supports Continuation Of Livestock Grazing And Trailing On Capitol Reef National Park	9
IC100	ISSUES - Cultural Resource Issues	5
IN100	ISSUES - Natural Resource Issues	73
IS100	ISSUES - Socioeconomic Resource Issues	3
IV100	ISSUES - Visitor Use Or Experience Issues	7
PN4000	Purpose And Need: Park Legislation/Authority	9
PN8000	Purpose And Need: Objectives In Taking Action	4
RF1000	References: General Comments	3
VR2000	Vegetation And Riparian Areas: Methodology And Assumptions	3
Total		227

Correspondence Count by Organization Type

Organization Type	Correspondences
Conservation/Preservation	3
Federal Government	1
Non-Governmental	1
Tribal Government	1
Unaffiliated Individual	34
Total	40
	3

Correspondence Distribution by Correspondence Type

(Note: Each correspondence may have multiple entries into PEPC due to the character limit. As a result, the total number of correspondence may be different from the actual number of correspondence totals.)

Type	Number of Correspondences
Web Form	28
Letter	14
Park Form	3
Total	45

Correspondence Distribution by State

State	Percentage	Number of Correspondence
UT	62.50%	25
MT	7.50%	3
NM	5.00%	2
AZ	5.00%	2
ID	5.00%	2
WY	5.00%	2
NJ	2.50%	1
CO	2.50%	1
NV	2.50%	1
TX	2.50%	1
Total		40

Public Scoping Comment Summary***AE24000 - Affected Environment Water Resources***

CONCERN STATEMENT: (Concern ID: 54432) A commenter identified the Fremont River on the EPA list of impaired waters due to high coliform accounts.

Representative Quote(s):

Corr. ID: 15 **Organization:** *Not Specified* **Comment ID:** 434912 **Organization Type:** Unaffiliated Individual

Representative Quote: Because to cattle the world is a bathroom, runoff water from the allotments to streams and lakes contains high concentrations of coliform bacteria. The Fremont River is on the 303(d) list of impaired waters in part due to high coliform counts. The waters from both allotments flow into Lake Powell, which has occasional beach closures due to coliform.

AL2000 - Alternatives: Alternatives Eliminated

CONCERN STATEMENT: (Concern ID: 54596) Commenters expressed concern for NPS not analyzing a no grazing alternative due to livestock grazing and trailing in CARE being a mandatory not a discretionary activity.

Representative Quote(s):

Corr. ID: 42 Organization: Western Watersheds Projects **Comment ID:** 435228 **Organization Type:** Conservation/Preservation

Representative Quote: A plain reading of the legislative history clearly shows that livestock grazing on CARE 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.

Corr. ID: 42 Organization: Western Watersheds Projects **Comment ID:** 435225 **Organization Type:** Conservation/Preservation

Representative Quote: The NPS logic for not analyzing the real no action (no grazing) alternative is specious and unsupportable. 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. 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.

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. 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 decision makers to compare the magnitude of environmental effects of the action alternatives.

Corr. ID: 42 Organization: Western Watersheds Projects **Comment ID:** 435226 **Organization Type:** Conservation/Preservation

Representative Quote: 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. 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 and 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.

Corr. ID: 42 Organization: Western Watersheds Projects **Comment ID:** 435227 **Organization Type:** Conservation/Preservation

Representative Quote: We see in the first underlined section the continuance of the same revocable permits that had been in place both before the Parks creation as well as after. The second underlined section merely grants the right that those persons named in the previous section shall be entitled to renew those permits. No one else is allowed to renew those permits. For instance, if the base property were to be sold, the permits could not be transferred to the new owner. Further, without getting into the rules of statutory construction, the NPS's interpretation that the permits grant a non-revocable right is destroyed by subsection d. There is no way for the first section to grant a right (the NPS's only rationale for not analyzing a true no grazing alternative) in light of the clear and unambiguous language in subsection d. For the above reasons, an EIS without a no grazing alternative will be legally deficient.

AL4000 - Alternatives: New Alternatives Or Elements

CONCERN STATEMENT: (Concern ID: 54465) Commenters suggested elements for the improvement and recovery of soils and biological soil crusts. Suggestions included managing for vegetation conditions, conducting modeling for determining biological soil crust potential, and reducing livestock numbers and season of use.

Representative Quote(s):

Corr. ID: 22 Organization: *Not Specified* **Comment ID:** 434937 **Organization Type:** Unaffiliated Individual

Representative Quote: Biological soil crust should not be considered a priority objective. Rather than manage for biological soil crust, consider managing for diverse plant species and creating soil structure that will allow seeds to penetrate the soil to allow for germination. Consider active vegetation treatments and strategic grazing to improve vegetation conditions across the entire park area.

Corr. ID: 35 Organization: Grand Canyon Trust **Comment ID:** 435249 **Organization Type:** Conservation/Preservation

Representative Quote: Biological soil crusts pose a particular challenge for grazing management within the CARE, as they can easily be destroyed by trampling, e.g., by cattle, and yet they provide essential ecosystem services, including stabilizing soils in arid ecosystems, increasing water infiltration and storage, and fixing carbon and nitrogen for native plants. The status of biological soil crusts (BSC) in CARE as a whole has not been systematically assessed, but Matthew Bowker and others (2006), developed models that predict for biocrust potential cover for Grand Staircase-Escalante National Monument. Bowker and others (2006) identify specific soil types that support high cover levels of biocrust. Consulting this work and making inferences for management of biocrusts within CARE would be useful and relevant given the proximity and similarity of ecosystems to CARE.

Corr. ID: 43 Organization: Western Watersheds Project **Comment ID:** 435240 **Organization Type:** Conservation/Preservation

Representative Quote: 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 6%, then permit requirements need to include such actions as major reductions in livestock numbers and time until recovery occurs.

CONCERN STATEMENT: (Concern ID: 54467) Elements suggested for protecting and recovery of threatened and endangered species, Mexican Spotted Owl, Winkler's cactus, Wright's fishhook cactus, and last chance Townsendia, and cultural resources included restricting livestock from known locations with fencing, reducing AUMs, providing objectives for vegetation recovery, and monitoring conditions to reduce impacts.

Representative Quote(s):

Corr. ID: 26 Organization: *Not Specified* **Comment ID:** 435136 **Organization Type:** Unaffiliated Individual

Representative Quote: Consider enlisting volunteer "cactus stewards" who can monitor individual plants or groups.

Corr. ID: 29 Organization: *Not Specified* **Comment ID:** 435156 **Organization Type:** Unaffiliated Individual

Representative Quote: The Park should aggressively pursue reduction in grazing AUMs to protect endangered plants and species of special concern, such as cacti in Cathedral Valley.

Corr. ID: 39 Organization: *Not Specified* **Comment ID:** 435171 **Organization Type:** Unaffiliated Individual

Representative Quote: The Park Service should map the locations of the threatened and endangered species to determine potential conflicts with the grazing allotments and stock trails. Livestock should be restricted from these areas with fencing or other means.

Corr. ID: 43 Organization: Western Watersheds Project **Comment ID:** 435242 **Organization Type:** Conservation/Preservation

Representative Quote: For MSO, the NPS must examine carefully the current degraded upland and riparian vegetative conditions in relation to MSO prey habitat. Clear, measurable objectives with timelines for recovery must be provided as common to all alternatives. The NPS must also carefully assess the current degraded conditions in relation to MSO Critical Habitat.

Corr. ID: 43 Organization: Western Watersheds Project **Comment ID:** 435241 **Organization Type:** Conservation/Preservation

Representative Quote: The NPS has done extensive monitoring of listed cacti species and has documented the destruction of plants as well as degradation of their habitat by livestock grazing and trailing. What has NOT happened is application of that monitoring to eliminate impacts to the species. That is what needs to happen in the EIS and ROD.

CONCERN STATEMENT: (Concern ID: 54533) Suggestions for determining stocking rate to improve rangeland health included identifying lands suitable for grazing based on current vegetation communities and recalculating forage availability and AUMs.

Representative Quote(s):

Corr. ID: 43 Organization: Western Watersheds Project **Comment ID:** 447382 **Organization Type:** Conservation/Preservation

Representative Quote: 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.

Corr. ID: 43 Organization: Western Watersheds Project **Comment ID:** 447381 **Organization Type:** Conservation/Preservation

Representative Quote: Let's look at the data which the NPS already has on forage availability. The most detailed and applicable Welsh 1982 which looked at the best case situation (at p2). The author found a total of 38.3 lbs of forage produced in the Sandy 3 allotment and 14 lbs of forage in the Hartnet allotment. His calculations utilized the faulty 'take half, leave half 50% utilization rate. Applying a more appropriate 25% harvest coefficient would result in 9.5 lbs per acres in the Sandy 3 and 3.5 lbs in the Hartnet allotment that could be allocated to livestock (without factoring in other NPS requirements).

The report found that the Sandy 3 allotment had 13,589 acres that livestock could physically access. 43,440 acres were found to be accessible to livestock in the Harnet allotment. The report stated that the figures provided were for the best case and that much of the accessible acres were producing less forage. But using this best case scenario without factoring in distance to water, slope or highly erosive soils or other factors would be 147 acres/AUM in Sandy 3 and 400 acres/AUM in the Hartnet allotment.

Corr. ID: 44 Organization: Yellowstone to Uintas Connection **Comment ID:** 435211 **Organization Type:** Conservation/Preservation

Representative Quote: Stocking Rate - Range scientists have determined that stocking rate rather than grazing system is the primary factor affecting rangeland production (Briske et al. 2008; Holechek et al. 1998; Van Poollen and Lacey 1979). Forage palatability must be considered and stocking rates determined based on the current plant community composition, eliminating those species that are not desirable from the capacity determination. The stocking rate for these allotments was established decades ago and has not been adjusted for current conditions.

Corr. ID: 44 Organization: Yellowstone to Uintas Connection **Comment ID:** 435204 **Organization Type:** Conservation/Preservation

Representative Quote: Lands available or capable should be identified and the stocking rate determined by current desirable forage on those available lands. This is generally the grasses as they are grazed in preference to shrubs and forbs.

CONCERN STATEMENT: (Concern ID: 54538) Commenters suggested increasing coordination with stakeholders (i.e., permittees) and livestock grazing and trailing permits that include enforceable standards. Enforceable standards included implementing upland and riparian utilization standards and compensation for damage to natural resources.

Representative Quote(s):

Corr. ID: 2 Organization: American citizen **Comment ID:** 434877 **Organization Type:** Unaffiliated Individual

Representative Quote: If you allow them to continue, their sites should be made smaller, closely monitored for infractions and fined for infractions, provide no services for use of the land, demand reconstruction of damaged land when they are off, and increase the fees they pay.

Corr. ID: 18 Organization: *Not Specified* **Comment ID:** 434925 **Organization Type:** Unaffiliated Individual

Representative Quote: 1. Encourage a closer relationship be established between the ranchers, NPS scientists, and other stakeholders.

2. The Park's administration of grazing in the park has been lax for many years and I would recommend much more attention be directed at the permitting, and enforcing the standards that are on the books.

Corr. ID: 35 Organization: Grand Canyon Trust **Comment ID:** 443740 **Organization Type:** Conservation/Preservation

Representative Quote: Public Transparency and Engagement.

1.1. Prior to allotment permit renewal, allotment management plan development, or vegetation projects for conditions impacted by livestock grazing, notice will be provided for a public tour to obtain comment and provide input.

1.2. Prior to a Decision Notice, all Environmental Assessments (EAs) will provide for public comment on the alternatives and their analyses.

1.3. Annual plans of use.

1.3.1. A map and annual plan of use for each allotment (with pastures) will be posted prior to livestock seasonal entry on the allotment.

1.3.2. Annual plans of use for the previous two years will be displayed on the website.

1.4. Mid-season adjustments of the annual permit will be posted as a revised annual permit.

1.5. Pre-annual permit meetings. When requested by a member of the public, CARE will participate in a pre-annual permit meeting to discuss problems observed/documented on the allotment the previous year, and proposed solutions to those problems. Such meetings will be available to the permittee and other members of the public.

1.6. Collaborations. CARE will encourage the establishment of independent, multi-stakeholder, consensus collaborations that include representatives of all relevant stakeholders, for purposes of advising CARE on increasing the sustainability of grazing and diverse grazing arrangements on CARE. CARE staff may participate as resources for these consensus collaborations, which would be convened or co-convened by non-CARE entities.

1.7. Interested publics will be encouraged to participate in and contribute to on-ground implementation and monitoring of grazing experiments developed by interested public, permittees and CARE personnel.

Corr. ID: 43 Organization: Western Watersheds Project **Comment ID:** 447383 **Organization Type:** Conservation/Preservation

Representative Quote: 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.

Corr. ID: 44 Organization: Yellowstone to Uintas Connection **Comment ID:** 435206 **Organization Type:** Conservation/Preservation

Representative Quote: Permits must contain enforceable standards, terms and conditions that require moves from pastures or the allotment upon meeting the upland utilization standard; a riparian utilization standard that leaves sufficient herbaceous vegetation height (7) to provide cover for riparian obligate species.

CONCERN STATEMENT: (Concern ID: 54542) Triggers/thresholds were suggested for livestock grazing to improve and maintain natural resources and to monitor socioeconomic conditions. The triggers included maintaining grazed areas at 80% of relevant ungrazed reference sites to provide habitat diversity for native wildlife and pollinators, to maintain biological soil crusts, and to maintain riparian areas; using only 25% to 30% of desirable forage, and adjusting utilization based on drought index to restore degraded upland vegetation communities.

Representative Quote(s):

Corr. ID: 35 Organization: Grand Canyon Trust **Comment ID:** 438756 **Organization Type:** Conservation/Preservation

Representative Quote: 1. Objective 1. Native Plant Communities.

1.1. Native plant communities reflect approximately 80% of the native plant diversity, density, age classes, and productivity of relevant ungrazed reference sites (i.e., CARE sites, which are of similar potential to support the native diversity and have been ungrazed by domestic ungulates for ten years).

1.2. Native plant communities support (at 80% of reference sites based on appropriate quantitative measures) CARE specific values including:

1.2.1. Plant species endemic to the Colorado Plateau

1.2.2. Rock crevice and canyon bottom native vegetation

1.2.3. Dunal pockets that hold unique plant species adapted to shifting sands

1.2.4. Plants highly adapted to saline areas

1.2.5. Relict plant communities

1.3. Native species reoccupy habitat niches and voids caused by disturbances at 80% the rate of reoccupation in recovery reference sites (i.e., similarly disturbed sites recently excluded from grazing)

based on appropriate quantitative measures.

1.4. Native plant communities support the following, at levels of at least 80% of relevant ungrazed reference areas:

1.4.1. Pollinator diversity, with pollinators often dependent on a particular species, genus, or plant family.

1.4.2. Cover, nesting, calving, and/or food habitat for native declining, uncommon, and endemic vertebrate animals.

1.4.3. Diversity of native aquatic biota.

1.4.4. Diversity of soil invertebrates.

1.5. Habitats are connected at a level to enhance populations of native species, including pollinators, based on estimated connectivity requirements using best available science.

Corr. ID: 35 Organization: Grand Canyon Trust **Comment ID:** 443732 **Organization Type:** Conservation/Preservation

Representative Quote: Objective 3. Soils.

3.1. Ground cover (including litter) is maintained at 80% of a relevant (e.g., similar soil, vegetation type, precipitation) CARE ungrazed site in order to protect the soil surface from excessive water and wind erosion, promote infiltration, detain surface flow, retard soil moisture loss by evaporation, and provide appropriate biological soil crust ecosystem functions (hydrology and nutrient cycling).

3.2. Biological soil crusts (aka cryptobiotic soils) which are critical for soil stability and nutrient availability are protected from trampling and other physical disturbance within at least 80% of their predicted available habitat within CARE;

3.3. Indicators of excessive erosion such as rills, soil pedestals, mass wasting, and actively eroding gullies and headcuts are within 80% of appropriate, identified reference sites.

Corr. ID: 35 Organization: Grand Canyon Trust **Comment ID:** 443743 **Organization Type:** Conservation/Preservation

Representative Quote: A 30% utilization standard, both for riparian and upland areas will be instituted, one pasture a year for each allotment until all pastures in each allotment have a 30% utilization limit. Utilization limits of 25% will be operative within all pastures during a drought year using the Standardized Precipitation Index of the National Drought Mitigation Center.

Corr. ID: 35 Organization: Grand Canyon Trust **Comment ID:** 443730 **Organization Type:** Conservation/Preservation

Representative Quote: Objective 2. Riparian and Wetland Areas.

2.1. Streambank vegetation, at 80% of reference riparian areas.

2.2. Riparian vegetation reflects, at 80% of reference riparian areas, maintenance of riparian and wetland soil moisture characteristics, diverse age structure and composition, high vigor, and large woody debris when site potential allows; and provides food, cover and other habitat needs for dependent animal species.

2.3. At 80% of reference riparian areas, point bars are revegetating and lateral stream movement is associated with natural sinuosity; channel width, depth, pool frequency and roughness appropriate to landscape position.

2.4. An active floodplain is present.

Corr. ID: 36 Organization: Grand Canyon Trust **Comment ID:** 443763 **Organization Type:** Conservation/Preservation

Representative Quote: Social/Economic Indicators will be used to monitor the social and economic sustainability of CARE grazing, including both the economic and cultural values of livestock grazing, and

the social value of participation in public lands grazing management decision-making by interested public in public lands grazing and/or ecosystem services provided by public lands. Social/economic Indicators are best developed via consensus among CARE personnel; permittees; and interested public.

6.1. Social/economic Indicators may include the following, which were published in the Report and Consensus Recommendations of the Collaborative on Sustainable Grazing for National Forests in Southern Utah (Collaboration, 2012):

6.1.1. Investment in grazing practices. Dollar value of time, capital and other investments (e.g., short and long-term infrastructure, monitoring, land improvement projects) related to grazing management changes on CARE allotment by:

6.1.1.1. Permittees,

6.1.1.2. CARE, and

6.1.1.3. Other entities

6.1.2. Total pounds of meat production/acre/allotment (5-10 year average)

6.1.3. Opportunities to participate in livestock grazing programs within CARE

6.1.3.1. For permittees: Number of individual permits and Animal Unit Months (AUMs) per permittee

6.1.3.1.1. Permitted AUMS by month

6.1.3.1.2. Grazing use reported by month

6.1.3.2. For other entities: Identification of programs and partners engaged in grazing management arrangements, e.g.:

6.1.3.2.1. Utah Division of Wildlife Resources (UDWR)

6.1.3.2.2. Conservation organizations

6.1.3.2.3. Utah Dept. of Agriculture's Grazing Improvement Program (GIP)

6.1.3.2.4. Watershed Restoration Initiative (WRI)

6.1.3.2.5. Natural Resources Conservation Service (NRCS)

6.1.4. Diversity of grazing management arrangements

6.1.4.1. Number and acreage by year of diverse grazing management arrangements, including but not limited

to:

6.1.4.1.1. Multiple allotments combined into a single system

6.1.4.1.2. Range improvements

6.1.4.1.3. Changing kind and class of livestock

6.1.4.1.4. Rest-rotation systems

6.1.4.1.5. Deferred rotation systems

6.1.4.1.6. On-off systems

6.1.4.1.7. Reduced use

6.1.4.1.8. Suspended use

6.1.4.1.9. Non-use

6.1.4.1.10. Closed areas

6.1.4.1.11. Grass banks

Corr. ID: 37 Organization: Grand Canyon Trust **Comment ID:** 443773 **Organization Type:** Conservation/Preservation

Representative Quote: A 30% utilization standard, both for riparian and upland areas will be instituted, one pasture a year for each allotment until all pastures in each allotment have a 30% utilization limit. The unpublished review of published literature by John Carter (2013) provides research evidence for 30% utilization. The literature cited in the review reveals not only ecological benefits and benefits post-drought, but also economic feasibility for the rancher. The Tushar Allotments Collaboration Final Report (Straube 2009) described the process whereby the two allotments that were the subject of the two-year, multi-

stakeholder, multi-agency collaboration on the Fishlake National Forest, would move from 60% to 30% utilization, one pasture a year, until all pastures were at 30% utilization (with one pasture being rested each year). Long-term trend transects read in 2008 were read again in 2013. While the final report has not yet been compiled, every transect is slightly up in cover and plant diversity (personal communication Reggie Swenson, Beaver Ranger District Range Specialist, Fishlake NF). The Trust re-read two aspen browse transects inside and outside a permanent range cage, and aspen in the outside transect was increasing in height, including above browse height, and decreasing in browse percent. Aspen in this area was not experiencing recruitment prior to the percent utilization reduction.

Corr. ID: 43 Organization: Western Watersheds Project **Comment ID:** 447380 **Organization Type:** Conservation/Preservation

Representative Quote: 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.

Corr. ID: 44 Organization: Yellowstone to Uintas Connection **Comment ID:** 435210 **Organization Type:** Conservation/Preservation

Representative Quote: Utilization - Science supports the use of a 25% utilization rate. Decades of research by range professionals provide direction to recover depleted bunchgrass communities, restore production and provide cover for wildlife species in upland and riparian areas. Galt et al. (2000)² and Holecheck et al. (2010)³ recommend 25 percent utilization to improve productivity and land health compared to higher utilization levels.

CONCERN STATEMENT: (Concern ID: 54544) Commenters suggested that objectives, desired conditions, and thresholds should be identified as well as monitoring elements to assess annual rangeland and CARE resource conditions to better protect natural resources and to effectively use adaptive management for livestock grazing and trailing management. Suggested elements included establishing reference areas within ungrazed areas on the allotments within every ecotype and using the Colorado Plateau rapid ecoregional assessment (REA).

Representative Quote(s):

Corr. ID: 25 Organization: *Not Specified* **Comment ID:** 435125 **Organization Type:** Unaffiliated Individual

Representative Quote: Grazing exclosures should be established in every ecotype in each allotment. There should be more of them and they should be bigger.

Corr. ID: 26 Organization: *Not Specified* **Comment ID:** 435131 **Organization Type:** Unaffiliated Individual

Representative Quote: At least one reference area should be established on both the Hartnet allotment and the Sandy 3 allotment. Reference area fencing should be regularly monitored to ensure their effectiveness. This could be a volunteer activity.

Corr. ID: 34 Organization: Grand Canyon Trust **Comment ID:** 435248 **Organization Type:** Conservation/Preservation

Representative Quote: Within CARE, approximately 87,797 acres are allocated to livestock grazing and approximately 156,316 acres are ungrazed lands. Ungrazed portions of CARE offer demonstrations of ecosystem recovery and potential in the absence of livestock grazing stressors. Due to the large proportion

of acres grazed versus ungrazed acres in each of the above vegetation communities, these vegetation types would be good candidates for establishing reference areas on ungrazed lands where they exist. The ungrazed and lightly grazed lands within Capitol Reef provide good demonstrations for both majority grazed vegetation types and vegetation types of which there are small representations in Capitol Reef.

Corr. ID: 35 Organization: Grand Canyon Trust **Comment ID:** 435250 **Organization Type:** Conservation/Preservation

Representative Quote: Colorado Plateau Rapid Ecoregional Assessment (REA). A Rapid Ecoregional Assessment was completed for the Colorado Plateau in May of 2012. REAs are meant to be a decision support tool to managers in the BLMs effort to move towards landscape-level management. Due to the fact that the Colorado Plateau REA did not assess livestock grazing as a stressor in the analysis, the new CARE grazing plan amendment process is a critical opportunity to integrate livestock grazing data with REA analysis to help guide and inform the grazing plan. REA datasets can be useful when applying criteria for developing diverse grazing arrangements, protecting riparian systems, biological soil crusts, and reducing erosion.

Corr. ID: 36 Organization: Grand Canyon Trust **Comment ID:** 443761 **Organization Type:** Conservation/Preservation

Representative Quote: Reference areas exist or are established for all Objectives in order to demonstrate potential for Objectives to be met, and/or potential rate of change toward meeting Objectives. Reference areas are established across CARE that represent the full range of ecosystem and plant community types (both riparian and upland) including sites that have received exotic vegetation treatments. A reference area, with the exception of recovery reference areas (areas where livestock grazing has ceased, but which have not been ungrazed for ten years). Exclosures of various sizes can begin to provide immediate benefits for comparison with sites on which livestock are being adaptively or experimentally managed for recovery toward particular Objectives. Recovery on the grazed sites (particularly for such physical features as ground cover, sheet erosion, and streambank protection; or for seedhead production) can be compared with the recently-ungrazed sites for comparative rates and types of recovery) consists of a site that has not been grazed or accessible to livestock for at least ten years.

Corr. ID: 44 Organization: Yellowstone to Uintas Connection **Comment ID:** 435220 **Organization Type:** Conservation/Preservation

Representative Quote: Adaptive Management - In regards to the stated goal of using adaptive management, the Park Service must recognize that adaptive management is based on having enforceable, quantitative standards and adequate monitoring. BLM recognizes some key elements of the process in determining whether it is applicable or not. Some of these include:

- a. Management objectives must be stated explicitly.
- b. In the absence of uncertainty, adaptive management is not needed.
- c. In the absence of targeted monitoring it is not possible to reduce uncertainty and improve management.
- d. Adaptive management is not feasible if progress in understanding and improving management is not recognizable.

Corr. ID: 45 Organization: US EPA Region 8 **Comment ID:** 435197 **Organization Type:** Federal Government

Representative Quote: The Draft EIS include the following features in the discussion:

- Achievable and measurable objectives to provide accountability and guide future decisions;
- Specific decision thresholds with identified indicators for each impacted resource;

- Targets that specify a desired future condition;
- Commitment to implement a monitoring plan with protocols to assess whether thresholds are being met;
- Commitment to use monitoring results to modify management strategies as necessary; and
- Designated timeframes for completion of necessary management modifications.

CONCERN STATEMENT: (Concern ID: 54545) Elements suggested for distributing cattle more evenly across allotments to protect water sources and natural and cultural resources and for the recovery of these resources included fencing around sensitive areas, piping water to troughs, maintaining existing ponds, establishing a rotation system in allotments with fencing, using riders to move livestock between pastures, developing water sources, removing cattle earlier in the spring, resting specific pastures, reducing AUMs, and herding and/or fencing between pastures.

Representative Quote(s):

Corr. ID: 10 Organization: Not Specified Comment ID: 434892 Organization Type: Unaffiliated Individual

Representative Quote: Sandy 3 allotment has several ponds that could be fixed and cleaned, to properly distribute cattle.

Corr. ID: 22 Organization: Not Specified Comment ID: 434933 Organization Type: Unaffiliated Individual

Representative Quote: In the Hartnet Allotment where grazing occurs during the spring, I suggest implementation of a rotation system that will allow rest every other year for at least half of the allotment. This may require CRNP's support and approval of fencing and water development. Please utilize these tools to the maximum extent possible prior to any other alternative.

Corr. ID: 25 Organization: Not Specified Comment ID: 435123 Organization Type: Unaffiliated Individual

Representative Quote: Removing cattle earlier in the spring (March or April) would give grasses a chance to recover at the start of the growing season and give them a competitive edge against exotic species.

Corr. ID: 25 Organization: Not Specified Comment ID: 435122 Organization Type: Unaffiliated Individual

Representative Quote: Archeological sites and other cultural sites should be fenced off so cattle cannot trample artifacts and disturb sensitive resources.

Corr. ID: 26 Organization: Not Specified Comment ID: 435133 Organization Type: Unaffiliated Individual

Representative Quote: Reducing AUMs, duration and intensity of grazing and/or use of fencing and herding to regulate grazing access.

Corr. ID: 26 Organization: Not Specified Comment ID: 435137 Organization Type: Unaffiliated Individual

Representative Quote: Consider removing cattle from both allotments 30 to 60 days before the June 1 "off date" to allow plant communities sufficient recovery time. If this does not produce desired recovery, consider resting specific pastures for longer periods of time.

Corr. ID: 27 Organization: Not Specified Comment ID: 435145 Organization Type: Unaffiliated Individual

Representative Quote: 1) Provide water for cattle in troughs or tanks to prevent them from standing in streams to drink 2) routinely rotate cattle around to prevent them from completely trampling areas and allow some possible regeneration of areas. I would also recommend having water troughs in several areas so the cattle don't have to walk to just one and leave deep trails to only one source.

Corr. ID: 29 Organization: *Not Specified* **Comment ID:** 435154 **Organization Type:** Unaffiliated Individual

Representative Quote: Springs and water sources need to be fenced off to prevent cattle from fouling, dessicating, and destroying them.

Corr. ID: 29 Organization: *Not Specified* **Comment ID:** 435157 **Organization Type:** Unaffiliated Individual

Representative Quote: Cattle should not be allowed anywhere near documented bighorn range. This includes most of the Waterpocket Fold's eastern slope, as well as the lower Deep Creek drainages.

Corr. ID: 35 Organization: Grand Canyon Trust **Comment ID:** 443747 **Organization Type:** Conservation/Preservation

Representative Quote: A pre-season plan and daily log will be filled for documentation of physical presence of a rider with the riders livestock 5 out of every 7 days throughout the season of use of the allotment.

Corr. ID: 35 Organization: Grand Canyon Trust **Comment ID:** 447361 **Organization Type:** Conservation/Preservation

Representative Quote: 3. A Diversity of Grazing Arrangements will be encouraged within CARE, including such arrangements as:

- 3.1. Collaborative grazing experiments
- 3.2. Multiple allotments combined into a single system
- 3.3. Range improvements
- 3.4. Changing kind and class of livestock (within existing limitations)
- 3.5. Rest-rotation systems
- 3.6. Deferred rotation systems
- 3.7. On-off systems
- 3.8. Grass banks/forage reserve areas
- 3.9. Reduced use areas
- 3.10. Suspended use areas
- 3.11. Non-use areas
- 3.12. Closed areas

Corr. ID: 45 Organization: US EPA Region 8 **Comment ID:** 435196 **Organization Type:** Federal Government

Representative Quote: The Draft EIS include a list of potential mitigation measures with consideration of the following:

- Special protections, such as buffer zones, for high quality riparian and wetland resources including springs and fens;
- Management to limit deposition of animal waste in and adjacent to water bodies, such as protecting or repairing any existing exclusions and providing upland water developments and development of new range improvements to discourage congregation near water bodies;
- Enhanced monitoring of resource conditions adjacent to high value water resources; and
- Monitoring to assess effectiveness of range improvements in protecting aquatic resources.

CONCERN STATEMENT: (Concern ID: 54598) Commenters expressed that the development of alternatives and the analysis of effects of the alternatives has to be based on the best available scientific data to ensure and uphold scientific integrity throughout the process.

Representative Quote(s):

Corr. ID: 38 Organization: Grand Canyon Trust **Comment ID:** 447406 **Organization Type:** Conservation/Preservation

Representative Quote: Scientific integrity of conclusions/statements: The NEPA regulation on methodology and scientific accuracy (40 CFR 1502.24) will be central for this EIS because trust among many interested publics is low, after the earlier, decade-long, failed effort to develop a CARE grazing management plan. In particular, as NEPA regulation 1502.24 states:

They [in this case CARE] shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement.

Conclusions refers to conclusory statements. If language is used carefully and conclusory statements are backed by evidence, data (e.g., CARE field monitoring), and/or scientific studies available for review by the public, greater trust will be garnered. Also, its legally required!

Corr. ID: 42 Organization: Western Watersheds Projects **Comment ID:** 447404 **Organization Type:** Conservation/Preservation

Representative Quote: 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.

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.

GC 1000 - Opposed to continuation of livestock grazing and trailing on Capitol Reef National Park

CONCERN STATEMENT: (Concern ID: 54430) Some commenters oppose the continuation of livestock grazing and trailing in the park.

Representative Quote(s):

Corr. ID: 1 Organization: Not Specified Comment ID: 434534 Organization Type: Unaffiliated Individual

Representative Quote: Please eliminate all grazing from these lands and allow them to heal and to serve the same scenic, historic and ecologic purpose for the majority of their owners/users, as any other National Park resource.

Corr. ID: 41 Organization: Not Specified Comment ID: 435179 Organization Type: Unaffiliated Individual

Representative Quote: Cattle "Trailing" through or within the Park should not be allowed. It is a resource damage intensive practice that should be phased out.

Corr. ID: 44 Organization: Yellowstone to Uintas Connection Comment ID: 435200 Organization Type: Conservation/Preservation

Representative Quote: The Yellowstone to Uintas Connection strongly opposes continued livestock grazing and trailing in the Park. There is no scientific or economic justification for its continuance and the Park Service should use the science and its own monitoring data to support closing this activity down.

GC 2000 - Supports continuation of livestock grazing and trailing on Capitol Reef National Park

CONCERN STATEMENT: (Concern ID: 54434) Many commenters support continued livestock grazing and trailing in the park.

Representative Quote(s):

Corr. ID: 8 Organization: Not Specified Comment ID: 434888 Organization Type: Unaffiliated Individual

Representative Quote: By cutting off grazing and Trail rights, special interest groups are choosing to cut Wayne County in half by trying to stop access. These rights need to be preserved and protected to ensure access to and through the Park. Pace Ranches has had grazing in the park for over 80 years. Please keep our grazing rights intact.

Corr. ID: 9 Organization: Not Specified Comment ID: 434890 Organization Type: Unaffiliated Individual

Representative Quote: Please allow the grazing to continue. Our heritage and traditions are being threatened and let's hope that level-headed leaders will hear our cry and protect our way of life over radicals who have shallow backgrounds and narrow perspectives.

Corr. ID: 10 Organization: Not Specified Comment ID: 434891 Organization Type: Unaffiliated Individual

Representative Quote: We will continue to graze and trail cattle the way we and our family has for generations, No matter what the outcome of the EIS is.

Corr. ID: 40 Organization: Not Specified Comment ID: 435174 Organization Type: Unaffiliated Individual

Representative Quote: We would like to see grazing and trailing given the opportunity to continue past the current legislative deadlines if evidence shows these activities do not have the negative impact that is the current perception.

IC100 - ISSUES - Cultural resource issues

CONCERN STATEMENT: (Concern ID: 54437) Less than 10% of Capitol Reef National Park has been surveyed for archeological resources. This is important as the archaeological resources found in the Park used to first describe the Fremont Indian culture are impacted by livestock trampling and feces, which may destroy perishable and diagnostic artifacts.

Representative Quote(s):

Corr. ID: 15 Organization: Not Specified Comment ID: 434905 Organization Type: Unaffiliated Individual

Representative Quote: Less than 10% of the Park has been surveyed for archeological resources. In addition to the many cultural resources currently known, there are undoubtedly many more undiscovered sites found throughout areas that are grazed by cattle. All of these sites are being subjected to the damage described in the Osborn report. Without surveys of grazed areas to find these sites, the Park may be allowing the destruction of cultural resources, some of which may be nationally significant.

All parks are required to perform a condition survey of a portion of their archeological resources each year to ensure the sites are not degrading. Sites with high potential for impacts should receive increased frequency of survey. The Park is not performing these surveys and does not even have any cultural resource personnel familiar with the Park's resources on staff. The EIS should address how the Park intends to reduce livestock impacts in authorized allotments to ensure that Park archeological resources are not impacted by grazing. The EIS should discuss how the Park will eliminate impairment of its archeological resources to meet obligations under NPS Policies. The EIS should discuss how the Park will meet requirements for monitoring the condition of known and currently unknown cultural resources.

Corr. ID: 15 Organization: Not Specified Comment ID: 434904 Organization Type: Unaffiliated Individual

Representative Quote: In the report *Impacts of Domestic Livestock Grazing on Archeological Resources of Capitol Reef National Park* by Osborn et al. 1987, they found that 5.6% of archeological artifacts in six plots were broken and 16.5% are buried from trampling by cattle in a single season of grazing. They describe that such breakage destroys diagnostic features and ruins the scientific value of the artifacts. This is especially important here because Capitol Reef artifacts were used to first describe the Fremont Indian culture. The document also describes areas where cattle congregate and form dense mats of dung over archeological sites. They discuss that this impact destroys perishable and diagnostic artifacts made from organic materials such as basketry, other woven goods, human remains, etc.

IN100 - ISSUES - Natural resource issues

CONCERN STATEMENT: (Concern ID: 54439) Commenters identified plant species listed under the Endangered Species Act—Wright's fishhook cactus, Winkler's cactus, and last chance *Townsendia*—which in their opinion have been adversely affected by, or are susceptible to damage from, cattle grazing and trailing. Among concerns raised were impacts from trampling, removal of biological soil crusts, increased erosion, soil compaction, invasive species, availability of pollinator food plants, and ability to successfully reproduce. Another commenter questioned if the cacti are truly affected by cattle given there is less trailing and grazing now than in the past.

Representative Quote(s):

Corr. ID: 15 Organization: Not Specified Comment ID: 434906 Organization Type: Unaffiliated Individual

Representative Quote: *Townsendia aprica*: The majority of known Park locations occur within the Hartnet grazing allotment; many of these sites are unacceptably impacted by livestock. The EIS should address how the Park intends to reduce livestock impacts in the Hartnet allotment to ensure that this threatened species is no longer impacted by livestock. The EIS should also describe how the Park will accomplish meeting its protection obligations for this species as stated in their NPS Policies and in the ESA.

Corr. ID: 15 Organization: Not Specified Comment ID: 434908 Organization Type: Unaffiliated Individual

Representative Quote: The Park has documented evidence of cattle trampling and killing cacti. A 20-year life history study was completed and a report compiled in 2014 describing the effect of livestock trampling on this species. This report found that livestock trampling reduces both the ability of this cactus to successfully flower and set seed and its longevity.

Corr. ID: 15 Organization: Not Specified Comment ID: 434907 Organization Type: Unaffiliated Individual

Representative Quote: *Pediocactus winkleri*: This is a very rare, federally threatened cactus species. The majority of known Park locations occur in the Hartnet grazing allotment; many of these localities are heavily impacted by livestock. The EIS should address how the Park, in the light of climate change, intends to reduce livestock impacts in authorized allotments to ensure that this threatened species is no longer impacted by livestock. The EIS should discuss how the Park will eliminate impairment of its resources to meet obligations under NPS Policies, including long term monitoring to ensure impacts are acceptable. The EIS should also describe how the Park will accomplish meeting its protection obligations for this species as stated in their NPS Policies and in the ESA.

Corr. ID: 34 Organization: Grand Canyon Trust Comment ID: 435245 Organization Type: Conservation/Preservation

Representative Quote: Wright Fishhook Cactus (*Sclerocactus wrightiae*)
Wright fishhook cactus has key populations within CARE, and has been listed as an endangered species since 1979. The U.S. Fish and Wildlife Service stated that the cactus has low potential for recovery given the number and level of threats that exist across its range. Wright fishhook populations have been assessed within Capitol Reef over the last several decades. Researchers have concluded that livestock grazing has had negative impacts on the populations of Wright fishhook cactus and can cause significant damage to

older cacti.

Corr. ID: 40 **Organization:** *Not Specified* **Comment ID:** 435172 **Organization Type:** Unaffiliated Individual

Representative Quote: There should be far less impact on anything in the Park than in the past. Why would the cactus and other species become more endangered now when there is less trailing and grazing than ever before? If in fact it can be proven that trailing and grazing contribute to the causes of endangerment. There is an enclosure that fences in the Hook cactus and I have personally observed that there are more cacti growing outside the fence than inside the enclosure. Cattle are only in CRNP during seven months of the year, October 15 to June 1. It is winter range, not summer range. Plants are not growing during this time of the year. We do not ever trail on the upper end of our allotment.

CONCERN STATEMENT: (Concern ID: 54440) Several commenters identified water resources—riparian areas, wetlands, streams, and springs—that have been adversely impacted by cattle grazing and trailing. Concerns identified were degraded water quality from feces, increased sedimentation yields, alteration of the riparian vegetation species composition from grazing and trampling, decline of riparian associated wildlife species, and degradation of a critical natural resource.

Representative Quote(s):

Corr. ID: 15 **Organization:** *Not Specified* **Comment ID:** 434911 **Organization Type:** Unaffiliated Individual

Representative Quote: We have seen Russian thistle and Halogeton (non-native weeds) increase substantially in the Hartnet Draw and South Desert areas. During days in the South Desert, we've hiked up several of the riparian drainages coming off the Waterpocket Fold. All those that contain seasonal or perennial water are used by livestock and are much degraded. Non-native tamarisk trees have also invaded most of these drainages. South Desert is a maze of livestock droppings and cattle go west up the drainages for a long distance trampling and eating the riparian vegetation. Stream banks and channels in small drainages are collapsed and trampled. In larger drainages, channels are down cutting which eliminates riparian vegetation and reduces soil water availability to adjacent terraces. As groundwater drops due to down cutting, soils dry out on adjacent terraces and the plant community types change to species adapted to drier conditions. Deep down cutting is especially apparent in the Sandy 3 allotment.

Oak Creek is twice annually subjected to livestock trailing. This riparian drainage has been degraded to such intensity that no seedling trees can survive the trampling and munching as cattle are allowed to slowly move between the USFS and BLM managed lands. Ackland Springs in the Hartnet allotment is a noteworthy wetland area in the Park. Lands adjacent to the springs contain significant archaeological resources and populations of all three federally listed plant species. Livestock are allowed to congregate for months along the wash at, above, and below the springs. This area is being unacceptably impacted by livestock which is destroying archaeological resources, killing listed plant species, degrading a wetland, and fouling a perennial water source in the Park. Cattle typically don't travel far from a water source; therefore all lands within a mile of the springs are excessively trampled. The EIS should discuss how the Park will eliminate unacceptable impacts of its resources around perennial waters and stream courses to meet obligations under the NPS Policies and the ESA, including long term monitoring to ensure impacts are acceptable. The EIS should also describe how the Park will recover the already altered wetland and upland plant associations at Ackland Springs so that non-native weeds do not increase in acreage.

Corr. ID: 29 Organization: *Not Specified* **Comment ID:** 435152 **Organization Type:** Unaffiliated Individual

Representative Quote: The biggest issue is water, and water sources. Cattle not only foul any water source they access, they actually make it less able to hold surface water, and create desert where before there was oases. These impacts are unacceptably severe at critical water sources such as the Polk Creek/Deep Creek spring in the Jailhouse Rock region of the South Desert, where every square foot of wet sand and shallow water is fouled with cow pies.

Corr. ID: 42 Organization: Western Watersheds Projects **Comment ID:** 435234 **Organization Type:** Conservation/Preservation

Representative Quote: Riparian areas within the CARE are extremely rare and extremely critical resources yet nearly all the riparian areas accessible to livestock are severely degraded such as the system, just rated by the NPS as 'non-functional the lowest possible category.

Corr. ID: 44 Organization: Yellowstone to Uintas Connection **Comment ID:** 435215 **Organization Type:** Conservation/Preservation

Representative Quote: Springs and Streams -The Analysis should evaluate current condition of these water sources relative to their potential attributes such as flow, habitat, shading, extent of wetland and riparian area, species potentially inhabiting these areas and delineate how the project will restore or degrade these areas and their native complement of aquatic and terrestrial plants and animals.

Corr. ID: 44 Organization: Yellowstone to Uintas Connection **Comment ID:** 435216 **Organization Type:** Conservation/Preservation

Representative Quote: Water Quality - The impacts of livestock on water quality include loss of stream shading, depleted streamflow, bank erosion, sedimentation and bacterial pollution. The Park Service must demonstrate that surface waters in the project area meet State and Federal water quality requirements.

Corr. ID: 45 Organization: US EPA Region 8 **Comment ID:** 435191 **Organization Type:** Federal Government

Representative Quote: We recommend that the Draft EIS describe potential effects on the CWA Section 303(d) listed water bodies within, or downstream of, the planning area.

Corr. ID: 45 Organization: US EPA Region 8 **Comment ID:** 435187 **Organization Type:** Federal Government

Representative Quote: We recommend the Draft EIS include the following baseline aquatic resource information (see additional information in sections below):

- A map and summary of planning area waters, including streams, lakes, springs and wetlands. It would be helpful if the summary identified high resource value water bodies and their designated beneficial uses (e.g., agriculture, fisheries, drinking water, recreation);
- Watershed conditions, including vegetation cover and composition, soil conditions, and areas not meeting desired future conditions;
- Surface water information, including available water quality data in relation to current standards, stream functional assessments, stream channel, stream bank stability conditions, sediment loads and aquatic life;
- Types, functions and acreage of wetlands, riparian areas, and springs;
- Available groundwater information, including quality and location of aquifers; and
- A map and list of Clean Water Act (CWA) impaired or threatened water body segments within, or downstream of, the planning area, including the designated uses of the water bodies and the specific

pollutants of concern. The Utah Department of Environmental Quality (UDEQ) can identify/validate any such CWA Section 303(d) listed water bodies potentially affected by the project.

CONCERN STATEMENT: (Concern ID: 54449) The degradation and reduction of biological soil crusts and associated soil processes due to soil disturbance from livestock grazing and trailing was identified as a concern. Specifically, the removal of biological soil crusts, which leads to the reduction of nitrogen fixation and water storage and increased susceptibility to wind and water erosion.

Representative Quote(s):

Corr. ID: 19 Organization: *Not Specified* **Comment ID:** 434928 **Organization Type:** Unaffiliated Individual

Representative Quote: I visited three exclosures in the area and found them to contain healthy cryptosols and grasses while outside the soils were trampled to dust or heavily populated with cactus.

Corr. ID: 30 Organization: *Not Specified* **Comment ID:** 435161 **Organization Type:** Unaffiliated Individual

Representative Quote: Biological soil crusts provide numerous benefits to soils and associated native plant communities through increasing soil stability, nitrogen fixation, and water storage. Unattended livestock can irreversibly destroy biological soil crusts through trampling and promote erosion.

Corr. ID: 42 Organization: Western Watersheds Projects **Comment ID:** 435232 **Organization Type:** Conservation/Preservation

Representative Quote: BSC coverage is approximately 80% of available habitat. Soils are very stable, with very little wind or water erosion. Carbon and nitrogen storage is very high for the system. 0045 is the other 99.9% of the grazed areas within the Park. BSC has been functionally eliminated. Soils are subject to wind and water erosion. The foundation on which this ecosystem is based, BSC, is not functioning. Clearly, livestock grazing is not resulting in the natural abundances, diversities, dynamics, distributions, habitats, and behaviors of native plant and animal populations. It must be noted here that much of the arid west, particularly the CARE 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.

CONCERN STATEMENT: (Concern ID: 54451) Climate change was identified as a concern due to the current and predicted longer dry periods and drought impacts, which could impact the timing and amount of plant growth and wildlife distribution and their habitat.

Representative Quote(s):

Corr. ID: 43 Organization: Western Watersheds Project **Comment ID:** 435239 **Organization Type:** Conservation/Preservation

Representative Quote: Your analysis must also factor in climate change, both in terms of the 2-6 week earlier greenup than 50 years ago as well as the decrease in effective precipitation and greater evaporation rates.

Corr. ID: 44 Organization: Yellowstone to Uintas Connection **Comment ID:** 435217 **Organization Type:** Conservation/Preservation

Representative Quote: Climate Change - Recognizing the current and coming changes to climate with longer, drier periods and drought, the Forest Service has implemented a Roadmap to address climate

change¹⁸. This roadmap provides guidance to that agency, including, but not limited to:

- a. Assess vulnerability of species and ecosystems to climate change
- b. Restore resilience
- c. Promote carbon sequestration
- d. Connect habitats, restore important corridors for fish and wildlife, decrease fragmentation and remove impediments to species migration.

CONCERN STATEMENT: (Concern ID: 54452) Commenters identified that grazing and trailing appear to change the distribution and abundance of native plant communities by reducing the species abundance and diversity of ground cover and increasing the distribution and/or spread of invasive weeds.

Representative Quote(s):

Corr. ID: 15 Organization: *Not Specified* **Comment ID:** 434901 **Organization Type:** Unaffiliated Individual

Representative Quote: Since 1995, we have observed three large areas (two in the South Desert and one in the Hartnet Draw) degrade from native Alkali Sacaton grassland vegetation into non-native weed (primarily Russian thistle and halogeton) associations. Vegetation type changes such as this cannot easily be recovered and brought back to a native vegetation association as stated in Miller et al. Many areas within the South Desert and Hartnet Draw are also becoming invaded by these non-native weeds, due to grazing by livestock.

Non-native and invasive weeds are dominant plants in the area around the stock corral and trailer along the Lower South Desert road in the Park. This area is both an eyesore to the public and a source for non-native weeds to invade and spread throughout the adjacent native vegetation.

In the Sandy 3 allotment near Cedar Mesa Campground, a large area has been converted to a cheatgrass dominated vegetation community. As was found at Canyonlands NP 30 years after grazing stopped, vegetation type changes.

Corr. ID: 16 Organization: *Not Specified* **Comment ID:** 434916 **Organization Type:** Unaffiliated Individual

Representative Quote: Exclosed land and grazed land show a dramatic contrast in the quality, quantity, and diversity of ground covering vegetation.

Corr. ID: 30 Organization: *Not Specified* **Comment ID:** 435160 **Organization Type:** Unaffiliated Individual

Representative Quote: I have observed grazed areas in the South Desert and the Hartnet Draw that are dominated by invasive plants, primarily Russian thistle and halogeton. Native vegetation is scarce and the trampling by livestock creates a barren landscape.

Corr. ID: 44 Organization: Yellowstone to Uintas Connection **Comment ID:** 435218 **Organization Type:** Conservation/Preservation

Representative Quote: Invasives and Weeds - Livestock grazing increases soil disturbance and promotes increases in invasive species and noxious weeds in addition to favoring unpalatable native increasers at the expense of decreasers. Water developments, salting areas, fence lines and roads are subject to increased populations of invasives. A review of livestock grazing related to weeds by Belsky and Gelbard (2000)²² described a number of mechanisms by which livestock grazing exacerbates weed infestations.

CONCERN STATEMENT: (Concern ID: 54455) Wildlife species were identified as a concern due to potential habitat fragmentation, disturbance, displacement and decreased species diversity from range improvements, livestock, and ranch vehicles.

Representative Quote(s):

Corr. ID: 36 Organization: Grand Canyon Trust **Comment ID:** 443768 **Organization Type:** Conservation/Preservation

Representative Quote: A two-year study in northwestern Utah (Wilson, et al. 2009) found low similarity between bee species in various plots, indicating that dune conservation strategies that preserve representative portions of dune systems may be insufficient to protect bees and the pollination services they provide. This has implications for size of ungrazed areas when used to understand the protection of pollinator diversity. However, the potential diversity of bees and other pollinators is extremely high on the Colorado Plateau. In a 1997 Science Symposium regarding, Griswold, et al. (1997) reported on a 15-year study of bee species in Utah's San Rafael Desert. More species (333) were recorded than in all of New England. They found one-third of the species specialized on a particular plant family or genus. They reported, Limited sampling in the Grand Staircase-Escalante National Monument suggests it to be equally diverse, but distinctive; nearly have of the Monuments bees are not present in the San Rafael Desert.

There are methods of sampling for abundance and diversity of pollinators and these methods can range from individual species identification (requiring identification by specialists) to simpler methods of recording groups of pollinators, e.g., bumblebee, honeybee, native bee, butterfly) along a transect. A study (OBrien, et al. 2011) in California via the mentored citizen science Fourth of July Butterfly Count, censused all butterfly species for 32 years at Willow Slough in Yolo County. The number of species observed declined by 39% during the 32 years, but statistically, the decline was not detected until year 13. This illustrates two points: (1) once-a-year sampling, if rigorously done is a useful monitoring tool for pollinators; and(2) declines can happen silently, unnoticed, in the absence of monitoring. The authors attribute the decline to broad patterns of land use and habitat continuity.

In the absence of tracking pollinators in some systematic manner, CARE has no idea of the degree to which pollinator diversity is being lost through livestock consumption of forbs or loss of native plant diversity. Pollinators, however, are a wildlife group that can be key to retention of native plant diversity and vice-versa.

Corr. ID: 44 Organization: Yellowstone to Uintas Connection **Comment ID:** 435213 **Organization Type:**

Representative Quote: Fences and Habitat Fragmentation - If Park Management proposes new pastures and fences, pipelines and water developments, these, combined with roads and trails for OHVs, constitute habitat fragmentation that adversely affects wildlife. Noise and disturbance from vehicles, openings created by roads, presence of cattle and sheep, fences, and water developments all have negative impacts on wildlife, either thru direct mortality, loss of habitat structure and food resources, fear, displacement from preferred habitats and foraging times. In addition the random killing of native carnivores and other animals by herders or livestock producers are a major concern. The Analysis must incorporate the best available science on protection and management of wildlife core and corridor areas and the factors that degrade these. It must also delineate the species affected and the impacts on those species.

CONCERN STATEMENT: (Concern ID: 54597) Wilderness was identified as a concern due to the proposed wilderness located in the Hartnet Allotment.

Representative Quote(s):

Corr. ID: 42 Organization: Western Watersheds Projects **Comment ID: 447386 Organization Type:** Conservation/Preservation

Representative Quote: 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.

IS100 - ISSUES - Socioeconomic resource issues

CONCERN STATEMENT: (Concern ID: 54426) Socioeconomics was identified as a concern due to the monetary value of livestock grazing and trailing on the permittee and local ranchers.

Representative Quote(s):

Corr. ID: 22 Organization: *Not Specified* **Comment ID: 434943 Organization Type:** Unaffiliated Individual

Representative Quote: Consider the socioeconomics of grazing and the importance it plays in the livelihood of local families

Corr. ID: 41 Organization: *Not Specified* **Comment ID: 435178 Organization Type:** Unaffiliated Individual

Representative Quote: Economic impact or effect on permittees should NOT be a considered a negative effect of the end of grazing with in the Park.

IV100 - ISSUES - Visitor use or experience issues

CONCERN STATEMENT: (Concern ID: 54457) Visitor use or experience was identified as being adversely impacted by livestock grazing and trailing due to the degraded visual aesthetics of the landscape from the presence of cows and smell of feces and increased erosion, and the lack of a clean natural water source for backcountry camping due to cows.

Representative Quote(s):

Corr. ID: 15 Organization: Not Specified Comment ID: 434903 Organization Type: Unaffiliated Individual

Representative Quote: For six months of the year, visitors passing through it on the Cathedral Valley loop find an area that looks and smells like a feedlot. In addition, the area around the stock corral and trailer along the Lower South Desert road in the Park resembles a feedlot during and long after cattle round-ups. These areas are both eyesores to the public and sources for non-native weeds to invade and spread throughout the adjacent native vegetation.

Corr. ID: 16 Organization: Not Specified Comment ID: 434917 Organization Type: Unaffiliated Individual

Representative Quote: Cows have effectively eliminated competition by campers and hikers in most of the national park north of Route 24. The fact that tax-paying citizen-stakeholders visit the area infrequently and briefly is because cow excrement and erosion dominate the landscape.

Corr. ID: 27 Organization: Not Specified Comment ID: 435144 Organization Type: Unaffiliated Individual

Representative Quote: I was once on a backpacking trip in the park when water was in short supply and the only known spring had cattle standing in it. Our trip had to be cut short because we had no viable water for ourselves to drink.

PN4000 - Purpose And Need: Park Legislation/Authority

CONCERN STATEMENT: (Concern ID: 54463) Commenters expressed concerns about NPS balancing the mission to preserve and protect natural and cultural resources for the enjoyment of future generations with the continuation of livestock grazing and trailing on CARE.

Representative Quote(s):

Corr. ID: 26 Organization: Not Specified Comment ID: 435126 Organization Type: Unaffiliated Individual

Representative Quote: Activities that are allowed to occur in parks are subject to the 1916 Organic Act that established the National Park Service and to the 2006 NPS Management Policies. These legal documents require the park to manage the land "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."

Corr. ID: 28 Organization: National Parks Conservation Association Comment ID: 435146 Organization Type: Unaffiliated Individual

Representative Quote: The National Park Service Organic Act of 1916 directs "...the fundamental purpose...is to conserve the scenery and the natural and historic objects and wildlife 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."

PN8000 - Purpose And Need: Objectives In Taking Action

CONCERN STATEMENT: (Concern ID: 54464) One commenter expressed concerns related to the need for CARE to prepare a Livestock Grazing and Trailing Management Plan given the eventual phase out of grazing.

Representative Quote(s):

Corr. ID: 22 Organization: *Not Specified* **Comment ID: 434932 Organization Type:** Unaffiliated Individual

Representative Quote: It appears there is already a plan in place to eliminate grazing on CRNP according to your scoping newsletter. The newsletter indicates that once the current generation of permit holders no longer graze in the very limited open grazing areas, the allotments will be closed. I question the need for this huge planning effort if the decision has already been made to eliminate grazing on the park in the near future.

CONCERN STATEMENT: (Concern ID: 54778) One commenter believes the purpose and need should primarily focus on biological resources and minimizing human impacts to these resources.

Representative Quote(s):

Corr. ID: 42 Organization: Western Watersheds Projects **Comment ID: 435231 Organization Type:** Conservation/Preservation

Representative Quote: The two critical issues 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.

RF1000 - References: General Comments

CONCERN STATEMENT: (Concern ID: 54458) Commenters submitted references they believe the NPS should consider in the development of alternatives and analysis of effects.

Representative Quote(s):

Corr. ID: 38 Organization: Grand Canyon Trust **Comment ID: 444700 Organization Type:** Conservation/Preservation

Representative Quote: It will be important for CARE to consider all relevant scientific information that is provided by commenters. While the Trust is sending a complete copy of each reference cited, some commenters may not. Just as CARE does not print all studies cited in its Draft or Final EIS, so a commenter need not send a complete copy of each reference cited for it to be considered in analysis of alternatives and in the Environmental Consequences section of the Draft and Final EIS.

Corr. ID: 43 Organization: Western Watersheds Project **Comment ID: 435238 Organization Type:** Conservation/Preservation

Representative Quote: 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.

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

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. Please review Carter, 2013 regarding the fallacy of grazing systems.

Corr. ID: 44 Organization: Yellowstone to Uintas Connection **Comment ID: 466919 Organization Type:** Conservation/Preservation

Representative Quote: Livestock grazing and its effects have been researched for decades and Range Science has basic principles that have been established through this research. There is little uncertainty if the scientific principles of stocking rate are followed, standards are established on an ecological basis, monitoring is designed appropriately and carried out, and management then reflects that monitoring data in a timely manner.

Management methods such as providing the rest needed for native plant communities to thrive and retain their vigor and productivity are well established by the agencies own research. The tendency of cattle to concentrate in riparian areas and areas of less than 10% slope are likewise well documented, yet use is not monitored in these areas in any timely and systematic manner and no rest is provided.

VR2000 - Vegetation And Riparian Areas: Methodology And Assumptions

CONCERN STATEMENT: (Concern ID: 54460) Commenters suggested using the normalized difference vegetation index to analyze vegetation changes in riparian and upland areas and evaluating capability and forage capability to assess risk to watersheds and vegetation from overgrazing.

Representative Quote(s):

Corr. ID: 35 Organization: Grand Canyon Trust **Comment ID: 435251 Organization Type:** Conservation/Preservation

Representative Quote: The Trust recently completed a study of vegetation production change within Grand Staircase-Escalante National Monument (CARE) using data averages of two ten year periods: 1986-1995 and 2002-2011 (Hoglander, et al. 2014). The study utilized LANDSAT Thematic data that measured net primary vegetation productivity and represented the data through the Normalized Difference Vegetation Index (NDVI). Though this study was not conducted for CARE, the region, climate, precipitation and ecological sites are similar to those found in adjacent CARE, and similar NDVI results were found for all three national forests in southern Utah (Hoglander and Williamson, 2014). We encourage CARE to examine these two studies and ecological types within the study for comparison and interpretation for similar sites found in CARE.

Corr. ID: 44 **Organization:** Yellowstone to Uintas Connection **Comment ID:** 435209 **Organization Type:** Conservation/Preservation

Representative Quote: Capability and Suitability -The analysis for all alternatives should evaluate capability and risk to the watersheds and habitat by ensuring that forage for cattle and sheep occurs in sufficient quantity in capable areas during low precipitation years to support the numbers grazed for the length of time grazed. Doing the necessary capability and forage capacity determination prevents the risk of overgrazing and loss of native plant communities and riparian areas by using the precautionary principle. This approach buffers management when staffing and funding are inadequate to monitor.

Appendix A. Correspondence List

ID	Author	Form Letter
1	N/A N/A I - Unaff.	No
2	[REDACTED] american citizen I - Unaff.	No
3	[REDACTED] Energy, Minerals, and Natural Resources Department I - Unaff.	No
4	[REDACTED] private citizen I - Unaff.	No
5	[REDACTED] I - Unaff.	No
6	[REDACTED] I - Unaff.	No
7	[REDACTED] I - Unaff.	No
8	[REDACTED] I - Unaff.	No
9	[REDACTED] I - Unaff.	No
10	[REDACTED] I - Unaff.	No
11	[REDACTED] I - Unaff.	No
12	[REDACTED] I - Unaff.	No
13	John B Keeler Utah Farm Bureau Federation L - Non-Governmental	No
14	[REDACTED] The Hopi Tribe Q - Tribal Government	No
15	[REDACTED] I - Unaff.	No
16	[REDACTED] I - Unaff.	No
17	[REDACTED] I - Unaff.	No
18	N/A N/A I - Unaff.	No
19	N/A N/A I - Unaff.	No
20	N/A N/A I - Unaff.	No
21	[REDACTED] I - Unaff.	No
22	[REDACTED] I - Unaff.	No
23	N/A N/A I - Unaff.	No
24	[REDACTED] I - Unaff.	No

ID	Author	Form Letter
25	N/A N/A I - Unaff.	No
26	N/A N/A I - Unaff.	No
27	N/A N/A I - Unaff.	No
28	Cory MacNulty National Parks Conservation Association I - Unaff.	No
29	N/A N/A I - Unaff.	No
30	[REDACTED] I - Unaff.	No
31	John G Carter Yellowstone to Uintas Connection I - Unaff.	No
32	N/A N/A I - Unaff.	No
33	[REDACTED] I - Unaff.	No
34	David C deRoulhac Grand Canyon Trust P - Conservation/Preservation	No
35	David C deRoulhac Grand Canyon Trust P - Conservation/Preservation.	No
36	David deRoulhac Grand Canyon Trust P - Conservation/Preservation	No
37	David C deRoulhac Grand Canyon Trust P - Conservation/Preservation	No
38	David C deRoulhac Grand Canyon Trust P - Conservation/Preservation.	No
39	[REDACTED] I - Unaff.	No
40	[REDACTED] I - Unaff.	No
41	[REDACTED] I - Unaff.	No
42	Jonathan B Ratner Western Watersheds Projects P - Conservation/Preservation	No
43	Jonathan B Ratner Western Watersheds Project P - Conservation/Preservation	No
44	John Carter Yellowstone to Uintas Connection P - Conservation/Preservation	No
45	Phillip S Strobel US EPA Region 8 F - Federal Government	No

Appendix B. Index by Organization Type

Organization	Corr. ID	Code	Description
Conservation/Preservation			
Grand Canyon Trust	34	AL4000	Alternatives: New Alternatives Or Elements
		IN100	ISSUES - Natural resource issues
	35	AL4000	Alternatives: New Alternatives Or Elements
		VR2000	Vegetation And Riparian Areas: Methodology And Assumptions
	36	AL4000	Alternatives: New Alternatives Or Elements
		IN100	ISSUES - Natural resource issues
	37	AL4000	Alternatives: New Alternatives Or Elements
		IN100	ISSUES - Natural resource issues
	38	AL4000	Alternatives: New Alternatives Or Elements
		RF1000	References: General Comments
Western Watersheds Projects	43	AL4000	Alternatives: New Alternatives Or Elements
		IN100	ISSUES - Natural resource issues
		PN8000	Purpose And Need: Objectives In Taking Action
		RF1000	References: General Comments
	42	AL2000	Alternatives: Alternatives Eliminated

Organization		Corr. ID	Code	Description
			AL4000	Alternatives: New Alternatives Or Elements
			IN100	ISSUES - Natural resource issues
Yellowstone to Uintas Connection	44		AL4000	Alternatives: New Alternatives Or Elements
			GC 1000	Opposed to continuation of livestock grazing and trailing on Capitol Reef National Park
			IN100	ISSUES - Natural resource issues
			RF1000	References: General Comments
			VR2000	Vegetation And Riparian Areas: Methodology And Assumptions
Federal Government				
US EPA Region 8	45		AL4000	Alternatives: New Alternatives Or Elements
			IN100	ISSUES - Natural resource issues
Non-Governmental				
Utah Farm Bureau Federation	13		AL4000	Alternatives: New Alternatives Or Elements
			IN100	ISSUES - Natural resource issues
Tribal Government				
The Hopi Tribe	14		GC 1000	Opposed to continuation of livestock grazing and trailing on Capitol Reef National Park
Unaffiliated Individual				
Energy, Minerals, and Natural Resources Department, Forestry Division	3		AL4000	Alternatives: New Alternatives Or Elements
National Parks Conservation Association	28		AL4000	Alternatives: New Alternatives Or Elements

Organization		Corr. ID Code	Description
		IC100	ISSUES - Cultural resource issues
		IN100	ISSUES - Natural resource issues
		IV100	ISSUES - Visitor use or experience issues
		PN4000	Purpose And Need: Park Legislation/Authority
American citizen	2	AL4000	Alternatives: New Alternatives Or Elements
private citizen	4	IN100	ISSUES - Natural resource issues
N/A	1	GC 1000	Opposed to continuation of livestock grazing and trailing on Capitol Reef National Park
	5	GC 2000	Supports continuation of livestock grazing and trailing on Capitol Reef National Park
	6	GC 2000	Supports continuation of livestock grazing and trailing on Capitol Reef National Park
	7	GC 2000	Supports continuation of livestock grazing and trailing on Capitol Reef National Park
	8	GC 2000	Supports continuation of livestock grazing and trailing on Capitol Reef National Park
		IS100	ISSUES - Socioeconomic resource issues
	9	GC 2000	Supports continuation of livestock grazing and trailing on Capitol Reef National Park
	10	AL4000	Alternatives: New Alternatives Or Elements
		GC 2000	Supports continuation of livestock grazing and trailing on Capitol Reef National Park
	11	IN100	ISSUES - Natural

Organization	Corr. ID	Code	Description
			resource issues
	12	GC 1000	Opposed to continuation of livestock grazing and trailing on Capitol Reef National Park
		PN4000	Purpose And Need: Park Legislation/Authority
	15	AE24000	Affected Environment Water Resources
		IC100	ISSUES - Cultural resource issues
		IN100	ISSUES - Natural resource issues
		IV100	ISSUES - Visitor use or experience issues
		PN4000	Purpose And Need: Park Legislation/Authority
	16	AL4000	Alternatives: New Alternatives Or Elements
		IC100	ISSUES - Cultural resource issues
		IN100	ISSUES - Natural resource issues
		IV100	ISSUES - Visitor use or experience issues
		PN4000	Purpose And Need: Park Legislation/Authority
	17	GC 1000	Opposed to continuation of livestock grazing and trailing on Capitol Reef National Park
	18	AL4000	Alternatives: New Alternatives Or Elements
		PN4000	Purpose And Need: Park Legislation/Authority
	19	AL4000	Alternatives: New Alternatives Or Elements
		IN100	ISSUES - Natural resource issues
		PN4000	Purpose And Need:

Organization	Corr. ID	Code	Description
			Park Legislation/Authority
	20	GC 1000	Opposed to continuation of livestock grazing and trailing on Capitol Reef National Park
	21	IN100	ISSUES - Natural resource issues
	22	AL4000	Alternatives: New Alternatives Or Elements
		GC 2000	Supports continuation of livestock grazing and trailing on Capitol Reef National Park
		IS100	ISSUES - Socioeconomic resource issues
		PN8000	Purpose And Need: Objectives In Taking Action
	23	AL4000	Alternatives: New Alternatives Or Elements
		PN4000	Purpose And Need: Park Legislation/Authority
	24	AL4000	Alternatives: New Alternatives Or Elements
		IN100	ISSUES - Natural resource issues
	25	AL4000	Alternatives: New Alternatives Or Elements
		IN100	ISSUES - Natural resource issues
	26	AL4000	Alternatives: New Alternatives Or Elements
		IN100	ISSUES - Natural resource issues
		IV100	ISSUES - Visitor use or experience issues
		PN4000	Purpose And Need: Park Legislation/Authority
	27	AL4000	Alternatives: New Alternatives Or

Organization	Corr. ID	Code	Description
			Elements
		IN100	ISSUES - Natural resource issues
		IV100	ISSUES - Visitor use or experience issues
	29	AL4000	Alternatives: New Alternatives Or Elements
		IN100	ISSUES - Natural resource issues
		IV100	ISSUES - Visitor use or experience issues
	30	IC100	ISSUES - Cultural resource issues
		IN100	ISSUES - Natural resource issues
	32	IN100	ISSUES - Natural resource issues
	33	AL4000	Alternatives: New Alternatives Or Elements
		IN100	ISSUES - Natural resource issues
	39	AL4000	Alternatives: New Alternatives Or Elements
	40	AL4000	Alternatives: New Alternatives Or Elements
		GC 2000	Supports continuation of livestock grazing and trailing on Capitol Reef National Park
		IN100	ISSUES - Natural resource issues
	41	GC 1000	Opposed to continuation of livestock grazing and trailing on Capitol Reef National Park
		IN100	ISSUES - Natural resource issues
		IS100	ISSUES - Socioeconomic resource issues

Appendix C. Index by Code

Code	Description	Organization	Corr. ID
AE24000	Affected Environment Water Resources	N/A	15
AL2000	Alternatives: Alternatives Eliminated	Western Watersheds Projects	42
AL4000	Alternatives: New Alternatives Or Elements	Energy, Minerals, and Natural Resources Department, Forestry Division	3
		Grand Canyon Trust	34
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			37
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		National Parks Conservation Association	28
		US EPA Region 8	45
		Utah Farm Bureau Federation	13
		Western Watersheds Project	43
		Western Watersheds Projects	42
		Yellowstone to Uintas Connection	44
		American citizen	2
		N/A	10
			16
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Code	Description	Organization	Corr. ID
			29
			33
			39
			40
GC 1000	Opposed to continuation of livestock grazing and trailing on Capitol Reef National Park	The Hopi Tribe	14
		Yellowstone to Uintas Connection	44
		N/A	1
			12
			17
			20
			41
GC 2000	Supports continuation of livestock grazing and trailing on Capitol Reef National Park	N/A	5
			6
			7
			8
			9
			10
			22
			40
IC100	ISSUES - Cultural resource issues	National Parks Conservation Association	28
		N/A	15
			16
			30
IN100	ISSUES - Natural resource issues	Grand Canyon Trust	34
			36
			37

Code	Description	Organization	Corr. ID
		National Parks Conservation Association	28
		US EPA Region 8	45
		Utah Farm Bureau Federation	13
		Western Watersheds Project	43
		Western Watersheds Projects	42
		Yellowstone to Uintas Connection	44
		private citizen	4
		N/A	11
			15
			16
			19
			21
			24
			25
			26
			27
			29
			30
			32
			33
			40
			41
IS100	ISSUES - Socioeconomic resource issues	N/A	8
			22
			41
IV100	ISSUES - Visitor use or experience issues	National Parks Conservation Association	28

Code	Description	Organization	Corr. ID
		<i>N/A</i>	15
			16
			26
			27
			29
PN4000	Purpose And Need: Park Legislation/Authority	National Parks Conservation Association	28
		<i>N/A</i>	12
			15
			16
			18
			19
			23
			26
PN8000	Purpose And Need: Objectives In Taking Action	Western Watersheds Project	43
		Western Watersheds Projects	42
		<i>N/A</i>	22
RF1000	References: General Comments	Grand Canyon Trust	38
		Western Watersheds Project	43
		Yellowstone to Uintas Connection	44
VR2000	Vegetation And Riparian Areas: Methodology And Assumptions	Grand Canyon Trust	35
		Yellowstone to Uintas Connection	44