



**National Park Service
U.S. Department of the Interior**

**Grand Canyon-Parashant National
Monument
Region 8**

**FINDING OF NO SIGNIFICANT IMPACT
BELNAP AND BIG SPRING PIPELINE ALLOTMENTS GRAZING PERMIT
RENEWAL**

Recommended:

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Approved:

Acting Regional Director, Interior Regions 8, 9, 10 and 12, National Park Service

1. Introduction

In compliance with the National Environmental Policy Act (NEPA), the Bureau of Land Management (BLM) and the National Park Service (NPS) have conducted an environmental analysis (PEPC 111150/DOI-BLM-AZ- A030-2023-0002-EA) to disclose and analyze the environmental consequences of continued livestock grazing within the Belnap and Big Spring Pipeline Allotments. This area is within Grand Canyon-Parashant National Monument (GCPNM or Monument), which is cooperatively managed by the BLM and the NPS. The grazing permittee submitted an application to renew the ten-year grazing permit with proposed changes. The IDT explored and evaluated different alternatives to determine whether the underlying need for the proposed action, providing for livestock grazing opportunities on public lands while ensuring that the allotments are achieving (or are progressing toward meeting) rangeland health standards, would be met. The EA analyzed three alternatives:

Alternative A (Proposed Action) – Combine Belnap and Big Spring Pipeline Allotments, extend the Season of Use for the Belnap Pastures, implement a nine-pasture rotation system, and rename and renew permit for the new combined Big Spring Pipeline Allotment.

Alternative B (No Action) – Renew Permit for Belnap and Big Springs Pipeline Allotments with no changes in Season of Use or combination of allotments.

Alternative C (No Grazing) - Reissue a Ten-Year Term Permit for the Belnap and Big Spring Pipeline Allotments with Zero Authorized AUMs.

This Finding of No Significant Impact (FONSI) informs NPS’s decision making process and only applies to NPS-managed lands. Likewise, the BLM issues their own FONSI applicable to their managed lands. The statements and conclusions reached in this FONSI are based on documentation and analysis provided in the EA and associated decision file. To the extent necessary, relevant sections of the EA are incorporated by reference below.

2. Selected Alternative and Rationale for the Decision

Based on the analysis in the EA, NPS and BLM selected Alternative A – Proposed Action.

Grazing occurs on allotments that are wholly on BLM managed lands, partially on BLM and NPS managed lands, or wholly on NPS managed lands. On allotments that are on partially or wholly NPS managed lands, the authority for grazing decisions is retained by NPS, with allotment management conducted by the BLM (GCPNM RMP/GMP) (BLM 2008a).

As stated in the GCPNM Proclamation: “Bureau of Land Management and the National Park Service, pursuant to applicable legal authorities, to implement the purposes of this proclamation. The National Park Service and the Bureau of Land Management shall manage the monument cooperatively and shall prepare an agreement to share, consistent with applicable laws, whatever resources are necessary to properly manage the monument; however, the National Park Service shall continue to have primary management authority

over the portion of the monument within the Lake Mead National Recreation Area, and the Bureau of Land Management shall have primary management authority over the remaining portion of the monument. The Bureau of Land Management shall continue to issue and administer grazing leases within the portion of the monument within the Lake Mead National Recreation Area, consistent with the Lake Mead National Recreation Area authorizing legislation. Laws, regulations, and policies followed by the Bureau of Land Management in issuing and administering grazing leases on all lands under its jurisdiction shall continue to apply to the remaining portion of the monument” (EA USGPO 2000).

The proposed action will combine the Belnap and Big Spring Pipeline allotments into one allotment that will then be renamed Big Spring Pipeline Allotment (Figure 1). The Belnap North and South pastures will become the Big Spring Pipeline Allotment North and South pastures (EA Appendix A, Figure 2). This will include extending the season of use from the current 12/1 – 5/15 use to year-round use in what is now the Belnap Allotment (Table 2.3). This will allow grazing rotation between nine pastures rather than the current seven.

Combining the two allotments will necessitate combining the Management Status (see EA 3.4.1 Livestock Grazing) which determines the level of management, including monitoring level, compliance priorities, and economic investments such as range improvements (structural and vegetation treatments). The current Management Status is improve (I) for the Belnap and maintain (M) for the Big Spring Pipeline allotments. Improve is the more intensive management status of the two categories. With the combining of the allotments, both will become Management Status improve. The majority of the two allotments have a high productivity potential. This is due to the majority of the acreage being relatively moderate to higher elevation with associated precipitation. Past investments in range improvements, including structural and vegetation treatments on these allotments, recognize the production capability and return on labor and capital investments.

The proposal will renew the grazing permit for the Big Spring Pipeline Allotment for a period of ten years. There will be no proposed change in the total number of Animal Unit Months (AUM)¹ limited to the current active preference and suspended AUMs for either allotment (Table 1.0). Existing range improvements, including water developments will continue to be maintained.

Belnap Allotment

In 2005, the permittee requested that the Belnap Allotment season of use be changed to 12/1 – 5/15 from 6/1 – 11/15. This request was analyzed in the Belnap Allotment Grazing Permit Renewal EA- NEPA # AZ-100-2005-0015-EA. This request was approved, and the season of use became 12/1-5/15.

Currently, the permittee removes most of their cattle off these allotments to private summer pastures allowing almost complete growing season rest for all pastures within these allotments. The permittee will continue to do this but is requesting to combine the two

¹ An AUM, or Animal Unit Month, is a unit of measurement indicating how much forage is eaten by a cow/calf pair in one month. Approximately 26 lbs. of dry matter.

Belnap pastures, (North and South) with the Big Spring Pipeline Allotment. The permittee has requested that the season of use for the Belnap Allotment pastures be extended to year-round grazing use. This will allow the flexibility of an expanded season of use. This will allow seasonal livestock rotations between the current Belnap North and South pastures and Big Spring Pipeline Allotment. Under this proposal, the cattle and four horses currently permitted on the Belnap Allotment will continue with the flexibility of year-round use.

Big Spring Pipeline Allotment

The Big Spring Pipeline Allotment grazing permit was fully analyzed in 2006 through the NEPA process with an EA for the current year-round season of use (Big Spring Pipeline Allotment Grazing Permit Renewal EA AZ-130-2006-0024). Under this proposed action, there will not be a change in AUMs or season of use for the current seven pastures.

Table 1.0 Proposed Permitted Livestock Use.

Allotment Number	Allotment Name	Livestock Number and Kind	Season of Use	Percent Public Land ¹	Active AUMs	Suspended AUMs	Total AUMs (Active and Suspended)
AZ04849	Big Spring Pipeline (former Belnap) North and South Pastures	48 Cattle	03/01 – 02/28	85	490	180	670
AZ04849	Big Spring Pipeline (former Belnap) North and South Pastures	4 Horses	03/01 – 02/28	85	41	0	41
Total					531*	180	711*
AZ04870	Big Spring Pipeline	211 Cattle	03/01 – 02/28	92	2337	1429	3766
AZ04870	Big Spring Pipeline	20 Horses	03/01 – 02/28	92	220	0	220
Total					2557	1429	3986

¹Percent public land is based on AUMs. *Total Active AUMs in the Belnap Pastures will remain 534 Active and Suspended 714.

Monitoring and Adaptive Management

The alternatives considered in this EA include adaptive management, which provides management options that may be needed to adjust decisions and actions to meet desired conditions as determined through monitoring. Adaptive management is a decision process that promotes flexible decision making that can be adjusted in the face of uncertainties as outcomes from management actions and other events become better understood. Monitoring

of these outcomes both advances scientific understanding and helps adjust policies or operations as part of an iterative learning process. BLM and NPS resource specialists will periodically monitor the allotments over the 10-year term of the grazing permit to ensure that the fundamentals or conditions of rangeland health are being met or making significant progress towards being met, in accordance with 43 CFR 4180 (see Section 3.2.3 of this EA). Monitoring will include a combination of regular interval trend monitoring on the BLM managed lands within the allotments, long-term integrated upland vital signs monitoring on both BLM and NPS managed lands, and comparison against one-time vegetation status projects such as the USGS Rangeland Condition Assessment (Duniway 2020).

If monitoring indicates that desired conditions are not being achieved and current livestock grazing practices are causing non-attainment of resource objectives, the first approach will be through modification of livestock grazing management of the allotment in cooperation with the permittee. Adaptive management allows the BLM to adjust the timing, intensity, frequency, and duration of grazing; the grazing management system; and livestock numbers temporarily or on a more long-term basis, as deemed necessary. This flexibility may be necessary due to drought conditions, fire, or flood events that may require adaptive management adjustments to be made. If a permittee disagrees with the BLM's assessment of the resource conditions or the necessary modifications, the BLM does have the authority to issue a Full Force and Effect Grazing Decision to protect resources.

Best Management Practices/Mitigation Measures

The selected alternative includes Terms and Conditions that will be incorporated into the grazing permit when issued in its description (see EA Section 2.3.1.2 and EA Appendix I). These Terms and Conditions, as well as the Monitoring and Adaptive Management strategy described above, were determined by both agencies to be adequate for proposed action resource protection. No additional BMPs or mitigation measures were deemed necessary.

Rationale

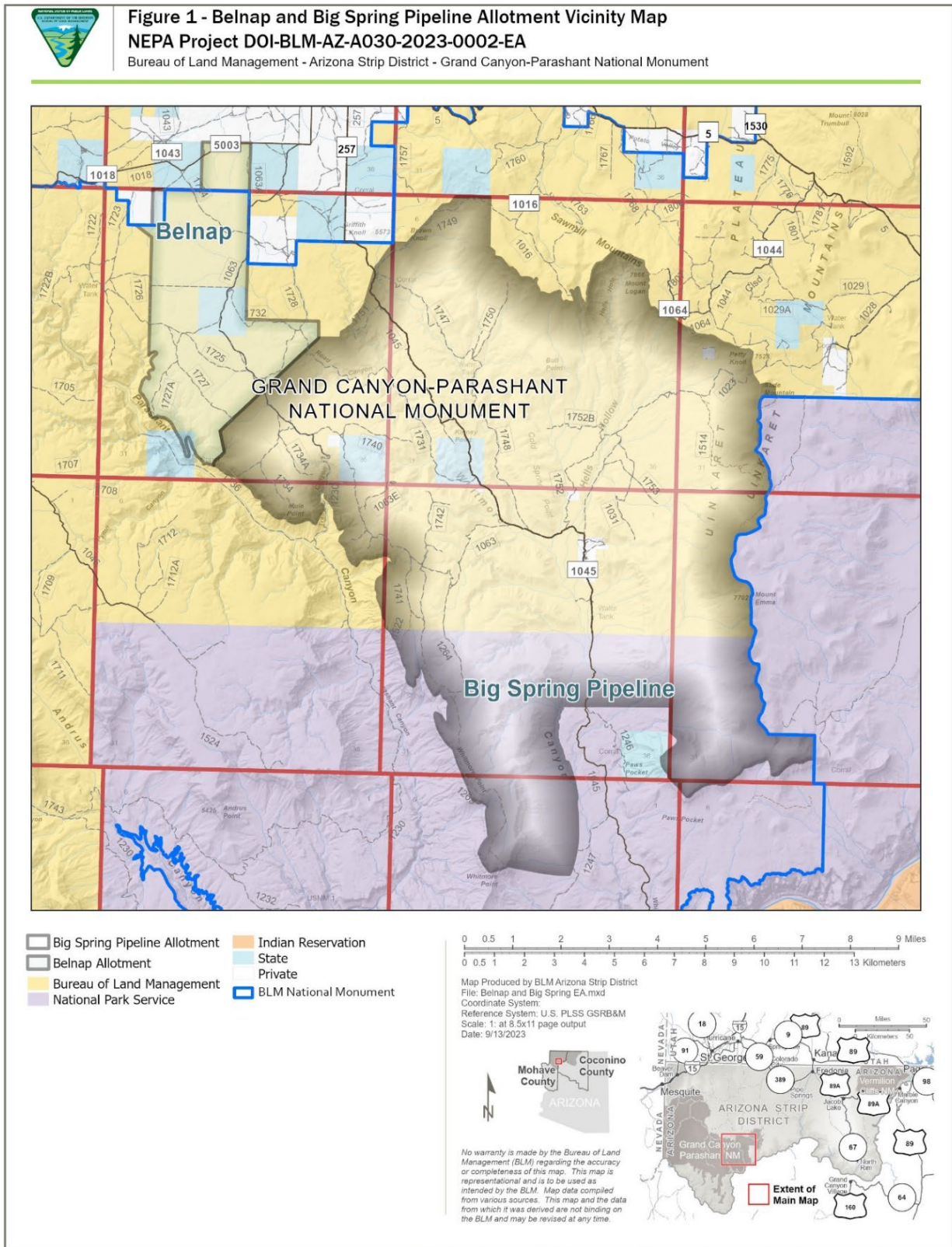
Alternative A - Proposed Action was chosen because it best addresses the purpose and need to provide for livestock grazing opportunities on public lands, where consistent with meeting management objectives, and to respond to the application to fully process and renew the permit to graze livestock on public land. In addition, this alternative provides the greatest opportunity to improved LHE standards through flexible utilization of forage at proper use levels. The Proposed Action will extend the season of use from the current 12/1 – 5/15 use to year-round use in what is now the Belnap Allotment (Table 1.0). This will allow grazing rotation between nine pastures rather than the current seven. The proposal will renew the grazing permit for the Big Spring Pipeline Allotment for a period of ten years. There will be no change in the total number of Animal Unit Months (AUM) limited to the current active preference and suspended AUMs for either allotment (Table 1.0). This decision has been made after considering environmental impacts to resources and resource uses, including wilderness, livestock grazing, soils, vegetation (including invasive, non-native species), and wildlife.

Alternative B - No Action Permit renewal would partially meet the purpose and need for action identified in the Purpose and Need – to provide for livestock grazing opportunities on public

lands where consistent with meeting management objectives and to respond to the application to fully process and renew the permit to graze livestock on public land. However, this alternative would not provide the permittee with the flexibility and improved operation management as they have requested and would not provide the greatest opportunity to improved LHE standards.

Alternative C – No Grazing alternative would not meet the purpose and need to provide for livestock grazing opportunities on public lands where consistent with meeting management objectives, including the Arizona Standards for Rangeland Health and Guidelines for Livestock Grazing Management (Appendix B), as well as the GCPNM RMP/GMP (BLM 2008a), or the need to respond to the application to fully process and renew the permit to graze livestock on public land.

Figure 1 - Belnap and Big Spring Pipeline Allotment Vicinity Map



3. Other Alternatives Considered

Alternative B: No Action Alternative

Alternative B (no action) The BLM would renew the existing grazing permit for the Belnap and Big Spring Pipeline Allotments for a period of ten years with no changes. There would be no proposed change in season of use for the Belnap Allotment. Livestock grazing would occur during the current season of use for each allotment, and with the number of AUMs limited to the current active preference (Table 1.0). This alternative will not provide the permittee with the flexibility and improved operation management as they have requested.

Alternative C: No Grazing Alternative

Alternative C is to reissue a ten-year term grazing permit on the Belnap and Big Spring Pipeline Allotments with zero authorized AUMs for active preference – all AUMs would be suspended (i.e., livestock grazing would be deferred for the ten-year permit period). In ten years, the allotments would be re-evaluated. Range improvements would not be maintained by the permittee for this ten-year term.

Alternatives Considered but Eliminated from Detailed Analysis

An alternative to permanently close or retire the two subject allotments was considered. The current permittee submitted an application to renew the ten-year livestock grazing permit. The GCPNM RMP/GMP Map 2.10 pp 2-78 (BLM/NPS 2008a) classifies the two subject allotments as open to grazing (see section 1.4 Conformance with Land Use Plans LA-GM-01). This alternative would not meet the purpose and need of this analysis, which is for the BLM to evaluate an application to renew the grazing permit for the two subject allotments for a ten-year term. Substantial use of the grazing permit must be made under 43 CFR §§ 4140.1(a)(2) and 4170.1-2. If this requirement is not met, the permit may be canceled and issued to a qualified permittee that will make substantial use. Therefore, this alternative was not carried forward for further analysis.

During Public Comment Period, the BLM and NPS received a comment proposing to exclude wilderness and proposed wilderness from grazing. Permitted grazing remains a potential use of both wilderness and proposed wilderness on BLM and NPS lands. Both subject allotments are open to grazing as per the GCPNM RMP/GMP (BLM/NPS 2008a). This proposal was considered but was not carried forward for further analysis.

4. Public Involvement/Agency Consultation

The Rangeland Resource Team (RRT), Interdisciplinary Assessment Team (IAT), livestock grazing permittees and other interested parties were invited to attend an issue scoping meeting for the Belnap Allotment on March 14, 2001. The issue scoping meeting for the Big Spring Pipeline Allotment was held on October 22, 2003, and a field visit on March 17, 2004. The two allotments were assessed under the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (S&Gs) (Appendix B).

Public comments regarding the Belnap S&G were received and consideration given to these

prior to signing the final Belnap Allotment S&G in September 2002. No comments were received regarding the final Big Spring Pipeline S&G, signed May 2006. As the LHE and S&G and associated public involvement is considered a step in the process of the term grazing permit issuance, these comments are summarized with the BLM response are summarized in the EA section 5.2 Summary of Public Participation.

A 15-Day Public Scoping Comment period was posted on the BLM's ePlanning and the NPS's PEPC on February 27, 2023. Ten scoping comment letters were received; those comments and responses are in Appendix I of the EA.

A 30-day public comment period was posted on the BLM's ePlanning and the NPS's PEPC beginning May 26, 2023. This posting included the EA, with associated tables, MRDG, and maps. This period was extended to July 12, 2023 due to technical issues with the sites. Sixteen public comment letters were received, those comments and responses are in Appendix I of the EA.

National Historic Preservation Act Section 106 Review

The nature of the proposed action is such that no impact can be expected on cultural resources. The proposed action is two-fold and includes combining two grazing allotments into one allotment and then the renewal of the existing grazing permit. No new range improvements are proposed. Since this activity has no ground disturbance and is unlikely to adversely affect historic properties, the exemptions in Appendix D (Exempted Undertakings) of the Arizona Statewide Conservation Vegetation and Range Management PA apply for the proposed action. See also Appendix G: Range Management Protocol in same document.

5. Tribal Consultation

The BLM and NPS consults with federally recognized tribes before making decisions or undertaking activities that will influence federally recognized tribes, their assets, rights, services, or programs. GCPNM initially contacted the tribes listed below as part of the Public Scoping process discussed in the section above. Formal Tribal consultation was initiated on March 28, 2023. No Tribal response has been received as of June 6, 2023.

Tribal entities consulted with include:

- Chemehuevi Indian Tribe
- Colorado River Indian Tribe
- Havasupai Indian Tribe
- Hualapai Indian Tribe
- Kaibab Band of Paiute Indians
- Las Vegas Paiute Tribe
- Moapa Band of Paiute Indians
- Navajo Nation
- Paiute Indian Tribe of Utah
- San Juan Southern Paiute Tribe
- The Hopi Tribe
- The Pueblo of Zuni

6. Finding of No Significant Impact

As described in the EA, the selected alternative has the potential for adverse effects on areas managed to maintain wilderness characteristics (BLM managed lands only), livestock grazing, proposed Wilderness (NPS managed lands only), soil density and erosion, vegetative community composition and structure, and wildlife habitat.

Using the criteria defined in the Council on Environmental Quality's NEPA regulations (40 CFR 1501.3(b)), the NPS has determined the Selected Alternative will not have significant adverse effects on the human environment. The detailed analysis of the potential impacts can be found in Chapter 4 of the EA. The following significance criteria were examined.

(i) Both Short and Long Term effects.

Implementing a nine-pasture rotation system will likely show some short-term improvement to livestock management, as well as improvement to vegetation. These benefits will become pronounced in the long-term. Additional rotation as well as continued removal of most livestock during the growing season may allow long-term attainment of Land Health Standard objectives. Improvement in desirable understory species will have long-term benefit to livestock and wildlife in this area.

(ii) Impacts that may be both beneficial and adverse.

The EA considered both the beneficial and adverse impacts of the action. The action will impact resources as described in the EA. See the relevant sections cited below for more information.

The beneficial effects of the selected action include:

- Issuance of a new ten-year term grazing permit which will provide for a continued viable ranching operation for the livestock operators and provide a degree of stability for the operators' livestock operations.
- Existing range improvements, including water developments, will continue to be maintained. These water developments provide water for both livestock and wildlife during critical times of the year.
- Vegetation (including Special Status and Invasive, Non-Native Plant Species) EA Section 4.2.3.

The action effectively changes only one aspect of previous grazing effects on vegetation: season of use on the Belnap Allotment. Shifting the season of use while adding no AUMs is a minor impact at most on the Belnap Allotment. It may have some beneficial impacts by allowing use to synchronize better with changing climate-related vegetation considerations such as timing of monsoons and other water events, and timing of seeding and flowering (Zimmer 2022).

Invasive plant management on GCPNM works with the permittees to allow for the treatment of spatially confined non-native plants such as Scotch thistle, this will likely continue. Widespread non-native plants such as *Bromus* spp. will continue occurring across the allotments. Given the local dominance of this plant in multiple areas, it is expected to continue spreading into areas where it has not yet been detected, regardless of the use of the allotment by cattle. Monitoring

for new invasive plant populations is ongoing at GCPNM and treatment is part of existing BLM Arizona Strip District policy.

The permittee on the Big Spring Pipeline Allotment currently rests the pastures using a deferred rotation to allow growth and persistence of key forage species. Expanding the pasture rotation will temporally “space out” the use of a particular pasture, increasing the number and potentially the length of rest periods from livestock grazing. As stated in EA Section 2.3.1.1, this will allow continued progress towards these pastures fully meeting LHE standards, while the Belnap Pastures (proposed Big Spring Pipeline North and South pastures) will continue to meet LHE standards.

An additional potential benefit to changing the season of use on the Belnap Allotment while retaining the current AUMs is the potential for a decrease in the actual number of cattle on the allotment at any one time (see Tables 1.2 and 1.3). If this does indeed occur, the potential for the effects of large groups of cattle to create and widen trails will decrease, allowing for an increase in soil stability and, indirectly, a greater potential of seed germination and plants to reach maturity.

Special status species are not expected to be negatively impacted by Alternative A (Proposed Action). Both *Y. baccata* and *C. whipplei* are common and persistent within the currently grazed Big Spring Pipeline Allotment, as is *C. whipplei* in Belnap Allotment. Continued grazing at current AUMs and expanded season of use should not change this. *P. distans* persists in Big Spring Pipeline Allotment under the current year-round season of use, there is potential of increased population size in pastures that may have longer rest rotations.

The adverse effects of the proposed action include:

- Temporary disruptions in wilderness character associated with range improvement maintenance. This may include a decrease in the sense of solitude and displacement of recreators to other areas within the Monument (EA Section 2.2.3 Management Common to Alternatives A and B; and Appendix D – Minimum Requirements Decision Guide (MRDG)).
- Wildlife (including Big Game, Migratory Birds, and Sensitive Species) EA Section 4.2.5: Herbaceous vegetation provides forage and concealment cover for wildlife species, particularly during the spring breeding period when fawning, nesting, and rearing of young occurs. Livestock grazing reduces the height and amount of herbaceous vegetation. The presence of livestock and the movement of livestock between areas of use could result in the direct disturbance or displacement of some wildlife from preferred habitats, nesting/birthing sites, or water sources. Both the disturbance and displacement of wildlife and the reduction of herbaceous forage and cover could limit the productivity and reproductive success of some species. However, the livestock grazing proposed in Alternative A allows the permittee to use the two allotments together rotating the cattle through the pastures of both allotments. This gives the ability to rest pastures or allotments from year to year. Using seasonal deferment and rest-rotation, vegetation will continue a static to upward trend, and therefore wildlife habitat components will be

maintained or improved. This alternative proposes a longer season of use for the Belnap Allotment (Belnap Pastures). Since the current season of use already includes the primary growing season for vegetation and the primary reproductive periods for most wildlife this change (expanded season of use) will minimally impact wildlife.

Migratory Birds

The current livestock management regime on these allotments has been in place for many years; it is therefore expected that livestock grazing proposed under this alternative will minimally affect habitat for migratory birds. Since utilization on vegetation is limited to 50% on the allotments, competition for forage between livestock and seed-eating migratory birds should be minimal and there is good grasses and palatable shrubs composition, leaving adequate resources for insect prey populations.

Sensitive Species

Peregrine Falcon and Golden Eagle

Nesting sites for peregrine falcons or golden eagles will not be impacted by livestock within the allotments because these sites are located on ledges in cliff faces that are inaccessible to livestock. Prey species for peregrine falcons, such as mourning doves, generally do well in human altered environments including grazed areas. Habitat for golden eagle prey species, such as black-tailed jackrabbits, could be adversely impacted if overutilization occurs. However, the effects of moderate grazing (such as that proposed under this alternative) can be negligible to slightly beneficial for many prey species (Olendorff 1993). Vegetation in the allotments is sufficient to provide food and shelter requirements for populations of prey species. Habitat for prey species will be minimally affected because grazing under this alternative provides periodic rest for the plant communities. Disturbance to nest sites from livestock management operations is unlikely given the remote and inaccessible locations these species choose for nesting. Implementation of this alternative is not likely to impact peregrine falcon or golden eagle habitat or nesting success.

Ferruginous hawk

Nesting sites and habitat for ferruginous hawk prey species have the potential to be impacted by livestock grazing within the allotments. Isolated nest trees used by this species could be impacted through rubbing of the trunk or by damaging the root system from congregations of cattle seeking shade; however, the likelihood of damaging these nest trees is minimal. Habitat for prey species, such as black-tailed jackrabbits, could be adversely impacted if overutilization occurs. However, the effects of moderate grazing (such as proposed under this alternative) can be negligible to slightly beneficial for many prey species (Olendorff 1993). Vegetation in the allotments is sufficient to provide food and shelter requirements for populations of prey species for the ferruginous hawk. Ferruginous hawks are sensitive to human disturbance near the nest site; however, no documented nests occur within the allotments so disturbance at nest sites will be sporadic and will not lead to a trend toward listing.

Northern Goshawk

Properly managed grazing has not been identified as having potential adverse impacts on the northern goshawk or its prey base (Kennedy 2003). Continued utilization below 50% will not measurably impact the variety of bird and mammal species that goshawks prey upon.

Burrowing owl

Nesting burrows for burrowing owls could potentially be impacted by livestock within the allotments through trampling. However, burrowing owls prefer open country with sparse vegetation and often do well in moderately grazed areas. Prey species are numerous in the allotments and include small mammals, insects, and reptiles. Vegetation in the allotments is sufficient to provide food and shelter requirements for populations of prey species. Disturbance to nest sites from livestock management operations may occur but this species is known to tolerate moderate levels of human disturbance (Klute et al. 2003). Implementation of grazing under this alternative will result in relatively minor impacts to burrowing owl habitat or potential nesting success in the allotments.

Pinyon Jay

While the potential effects of livestock grazing on pinyon jays are unclear, the policy of removing pinyon-juniper woodlands to promote grazing has resulted in habitat loss in several southwestern states (Wiggins 2005). However, no pinyon-juniper removals are proposed under this alternative, therefore impacts to nesting areas, tree canopy, or food sources will be negligible and similar to those described above for migratory birds.

Monarch Butterfly

Livestock grazing can alter the structure, diversity, and growth pattern of vegetation, which can affect the associated insect community. Grazing during a time when flowers are already scarce may result in insufficient forage for the monarch butterfly. Recommended grazing BMPs (USDA 2015) for monarch butterflies and other pollinators include:

- Protect the current season's growth in grazed areas by striving to retain at least 50% of the annual vegetative growth on all plants.
- Minimize livestock concentrations in one area by rotating livestock grazing timing and location to help maintain open, herbaceous plant communities that are capable of supporting a wide diversity of butterflies and other pollinators.
- These actions are incorporated into the proposed grazing systems for the allotments under this alternative. Implementation of grazing under this alternative will therefore result in relatively minor impacts to monarch butterflies and their habitat in the allotments.

(iii) Effects on public health and safety.

The action will not result in any effects to public health and safety. There are no public health or safety concerns associated with permitting livestock grazing on the Belnap and Big Spring Pipeline Allotments (See EA Table 3.1). No negative effects to public health and safety will result from implementing the selected action, since no chemicals subject to reporting under Superfund Amendments and Reauthorization Act, Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the project. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the project. Any trash produced will be confined in a covered container and hauled to an approved landfill. Burning of waste or oil will not be done, and

human waste will be contained and disposed of at an approved sewage treatment facility.

(iv) Effects that would violate Federal, State, Tribal, or local law protecting the environment.

The action does not violate any federal, state, local or tribal law or requirement imposed for the protection of the environment. State, local, and tribal interests were given the opportunity to participate in the environmental analysis process and expressed no concern about this matter (See Chapter 5 in EA). In addition, the action is consistent with applicable land management plans, policies, and programs (See Sections 1.4 and 1.5 of the EA).

Monument Proclamation

The Monument is managed under the GMP/RMP to ensure that important Monument objects are protected. The EA analyzed impacts to Monument resources it has been determined that these resources will remain protected. The selected action does not authorize any new ground disturbing activities. The selected action does authorize maintenance of existing range improvements is authorized within the existing “footprint” of the improvement. The proposed action will have no adverse effects on cultural resources.

Wilderness

Proposed actions within a designated wilderness area or a proposed wilderness area must be reviewed using the minimum requirements framework. A Minimum Requirements Decision Guide (MRDG) has been developed as part of this analysis. It addresses the minimum tools necessary to implement the alternatives as well as the impact to wilderness characteristics in designated wilderness or proposed wilderness within the Big Springs Pipeline Allotment.

The impacts of these effects, based on the minimum tool necessary analyzed in the MRDG (Appendix D), are all direct impacts. Use of motor vehicles and/or motorized equipment to maintain range improvements are relatively short term and highly localized as the work will only occur on previous established grazing infrastructure within the Big Spring Pipeline Allotment. As such, their impacts are minimal on the undeveloped, natural and solitude wilderness qualities. Impacts on trammeling and naturalness are beneficial to vegetation abundance and growth by decreasing grazing pressure, though the magnitude of change is difficult to quantify. Longer term impacts are related to the continuation of grazing and the presence of grazing infrastructure. Both conditions were expected to persist in the Mt. Logan Wilderness Management Plan and the NPS Draft Wilderness Proposal, making these impacts acceptable, with minimum tools analysis for any motorized or mechanical equipment used to continue and maintain cattle grazing. A review of GIS shows that there are no river segments within the allotments that are designated, eligible, or suitable as wild, scenic, or recreational under the Wild and Scenic Rivers Act (EA Table 3.1).

National Historic Preservation Act

The BLM and NPS will manage the allotments to ensure that livestock grazing continues compliance with Section 106 of the National Historic Preservation Act (36 CFR §800.3). The proposed action will have no adverse effect on cultural properties eligible for the National Register. No range improvements or other ground-disturbing activities are proposed. Impacts from cattle grazing can occur in areas of high cattle concentration or from rubbing against rock art panels and historic structures-none of which are known within the allotments (EA Table 3.1). The nature of the proposed alternatives will have no effect on eligible cultural resources. The cultural resource inventory was waived because the nature of the proposed action is such that no impacts can be expected on significant cultural resources. In the event that significant archaeological resources (standing walled historic or prehistoric structures, rock art, or other sites potentially eligible to the National Register of Historic Places) are found to be impacted by cattle, preventative and mitigation measures will be implemented including, but not limited to, fencing, recordation, data collection, and monitoring as is standard operating procedure under the National Historic Preservation Act. I have determined that the renewal of the grazing permit, in the absence of any construction of new range improvements, will not adversely affect district sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, or cause loss or deterioration of significant scientific, cultural, or historical resources.

Endangered Species Act

According to the United States Fish and Wildlife Service, as of December 1, 2020, there are no known Threatened, Endangered, or Candidate plant species or designated critical habitat on the Belnap Allotment or Big Spring Pipeline Allotment. The grazing permit renewal analyzed in the EA will have no impact on special status plants (EA Table 3.1).

The California condor is the only known federally listed animal species that may occur within these allotments – condors may occasionally fly over or feed in this allotment at any time of year. California condors are federally listed as endangered, and a population of these condors was reintroduced on the Arizona Strip in 1996. This population is designated as experimental non-essential under Section 10(j) of the Endangered Species Act. There is no evidence that rangeland health on this allotment is limiting or restricting condor population growth. Thus, no effect to this species is expected from any of the alternatives (EA Table 3.1).

7. Conclusion

As described above, the selected alternative does not constitute an action meeting the criteria that normally requires preparation of an environmental impact statement (EIS). The selected alternative will not have a significant effect on the human environment in accordance with Section 102(2)(c) of NEPA.

Based on the foregoing, it has been determined that an EIS is not required for this project and, thus, will not be prepared.

8. Appendices

Appendix A – Errata indication text changes to the EA

Appendix B – Responses to substantive public comments

Appendix C – Non-Impairment Determination

Appendix D – Minimum Requirements Analysis

Appendix A: Errata Indicating Text Changes to EA

The following errata constitute changes to The Belnap and Big Spring Pipeline Allotments Grazing Permit Renewal EA during and after public comment period. Non-substantive changes, such as formatting, page numbers, grammar, punctuation and spelling, are not included. Following the public comment period, there were minor edits and some clarification of EA sections, but no substantial changes to the EA. Additions are underlined, retractions are struck through.

1.1 Introduction and Background

This Environmental Assessment (EA) has been prepared to disclose and analyze the environmental consequences of the proposed grazing permit renewal, as well as alternative livestock management, for the Belnap and Big Spring Pipeline allotments (Appendix A, Figure 1 Vicinity Map). Livestock grazing on public lands is managed according to grazing regulations found in the Code of Federal Regulations (CFR) at 43 CFR Part 4100 and 36 CFR §2.60 – Livestock use and agriculture. This analysis provides information as required by the Bureau of Land Management (BLM) implementing regulations for the National Environmental Policy Act (NEPA), the Taylor Grazing Act (TGA), National Park Service (NPS) 2006 Management Policies, ~~and the Federal Land Policy and Management Act (FLPMA), and Presidential Proclamation 7265~~ to determine whether to authorize grazing within these allotments and whether changes to current management are necessary. This EA also serves as a tool to help the authorized officer make an informed decision that is in conformance with the Grand Canyon-Parashant National Monument (GCPNM) Resource Management Plan/General Management Plan (RMP/GMP) (BLM 2008a). The action culminates an evaluation conducted on the allotments under Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (RLH) (Appendix B) (see 3.2.3 Land Health Evaluation (LHE)). RLH is synonymous to LHE however, RLH continues to reference the BLM accepted Interpreting Indicators of Rangeland Health, Version 4 evaluation that was conducted on these two allotments (BLM 2005). Rangeland Ecosystem Conditions (REC) is a monitoring methodology employed on NPS managed lands. These plots established a baseline for future trend analysis for vegetation composition, plant and soil cover, and soil stability. This EA analysis will determine if current grazing management practices would maintain desirable conditions and continue to allow improvement of public land resources, or if changes in grazing management for the allotments are necessary.

The EA is a site-specific analysis of potential impacts that could result with the implementation of a proposed action or alternatives to the proposed action. The EA assists the BLM and NPS in project planning, ensuring compliance with the NEPA, and in making a determination as to whether any “significant” impacts could result from the analyzed actions. ~~“Significance” is defined by NEPA and is found in regulations 40 CFR 1508.27.~~ An EA provides evidence for determining whether to prepare an Environmental Impact Statement (EIS) or a “Finding of No Significant Impact” (FONSI). If the decision maker determines that this project would have ~~has~~ “significant” impacts following the analysis in the EA, then an EIS will ~~would~~ be prepared for the project.

If the EA leads to a finding that no “significant” impacts are ~~determined~~ anticipated, the BLM and NPS will prepare separate FONSI for approval. Additionally, the BLM will prepare a Decision Record (DR) in accordance with 43 CFR 4160 approving the selected alternative. A DR, including the FONSI, documents the reasons why implementation of the selected alternative would not result in “significant” environmental impacts (effects) beyond those already addressed in the RMP/GMP.

1.2 Purpose and Need

A grazing permit renewal application has been received from Superior Cattle, LLC, the current permittee, to renew the ten-year grazing permit on the Belnap Allotment (AZ04849) and Big Spring Pipeline Allotment (AZ04870). The ten-year permit would apply to both NPS and BLM managed lands within the two allotments. The need for the proposed action is to respond to ~~for the permittee’s application to be able to~~ continue livestock grazing on the allotments ~~through utilization of forage at proper use levels~~. The BLM and NPS will determine whether to renew the grazing permit and, if renewed, determine what, if any, modifications are needed to maintain or continue to make significant progress towards the attainment of rangeland health (Appendix C – Utilization and Monitoring Data) and the RMP/GMP (BLM 2008a).

The purpose of this EA is to ~~process~~ assess the term grazing permit on the Belnap Allotment (AZ04849) and Big Spring Pipeline Allotment (AZ04870) in accordance with all applicable laws, regulations, and policies. Belnap Allotment and the current grazing rotation, Animal Unit Months (AUMs), and season of use was analyzed and fully processed through the Belnap Allotment Grazing Permit Renewal EA, NEPA # AZ-130-2005-0015-EA. Big Spring Allotment was analyzed for current grazing rotation, AUMs, and season of use in the Big Spring Allotment Grazing Permit Renewal EA, NEPA # AZ-130-2006-0024-EA. Because the grazing permit for the Belnap Allotment expired in 2015 and Big Spring Pipeline Allotment expired in 2017, the BLM renewed the permits for a ten-year period with the same terms and conditions pursuant to Section 402(c)(2) of the FLPMA as amended by Public Law No. 113-291, pending compliance with applicable laws and regulations. This action resulted in a new permit being issued while an EA is prepared to process the permit. The purpose of this EA is for an interdisciplinary team to analyze the site-specific environmental impacts of issuing a new livestock grazing permit on resources that may be affected in the Belnap and Big Spring Pipeline allotments. Compliance with all applicable laws and regulations includes consultation, coordination, and cooperation with affected individuals, interested publics, States, and Indian Tribes; completion of the applicable level of NEPA review; and ensuring that the allotments are achieving or making significant progress toward achievement of Standards for Rangeland Health and RMP/GMP objectives.

Livestock grazing is a ~~not accepted and valid~~ potential use of public lands managed by the BLM as provided for by the TGA, FLPMA, and the Public Rangelands Improvement Act (PRIA), as amended. Regulations controlling livestock grazing on public lands are found in 43 CFR 4100.0-2. Section 1.4 Conformance with Land Use Plans elaborates on the specific Management Actions authorized by the RMP/GMP and associated Record of Decisions that are applicable to grazing on NPS managed lands as well as additional specific livestock grazing guidance for both NPS and BLM administered lands. Section 1.5 Relationship to Statutes,

Regulations, or Other Plans identifies the authority granted by the Proclamation creating GCPNM allowing for the continuing issuance of grazing leases. The objective of these regulations are to “promote healthy sustainable rangeland ecosystems; to accelerate restoration and improvement of public rangelands to properly functioning conditions; to promote the orderly use, improvement and development of the public lands; to establish efficient and effective administration of grazing of public rangelands; and to provide for the sustainability of the western livestock industry and communities that are dependent upon productive, healthy public rangelands”.

~~The majority of monitoring sites on these two allotments, in both BLM and NPS managed lands, have shown a static or increase in composition and cover of key forage species and a decrease in bare soil with a corresponding increase in live vegetation plant cover and litter since plot establishment. Two monitoring sites have shown a decrease in understory primarily due to woody plant encroachment; this is fully discussed in Chapter 3.~~ The Key Species Grazed Class method was used to collect utilization data (Schmutz 1963; BLM 1999). This ocular utilization study method is widely used by most of the land management agencies to determine forage utilization levels for livestock and wildlife. Annual utilization levels since the monitoring plots were established in both allotments has averaged ~~been~~ approximately 30 percent or less, well below the 50 percent allowable level. There have been four occasions in the Big Spring Pipeline Allotment in the past decade when utilization exceeded the 50 percent threshold on a key species in an individual pasture. The lower elevation Big Spring Pipeline pastures have utilization guidelines imposed by the Big Spring Pipeline 1994 Allotment Management Plan (AMP) of 45 percent utilization. This has been exceeded twice in the past decade. There has been one occasion in the Belnap Allotment within the past decade when the 50 percent threshold was exceeded. These times when utilization levels were exceeded are isolated cases and are not common practices of grazing management for the permittee on these two allotments.

Decision to be Made

~~The GCPNM’s BLM Monument Manager and NPS Regional Director are the authorized officers responsible for the NEPA decisions regarding management of public lands within these allotments. Based on the results of the NEPA analysis, the authorized officers will issue a determination of the significance of the environmental effects and whether an EIS would be required. If the authorized officers determine that it is not necessary to prepare an EIS, the EA will be deemed sufficient and will provide information for the authorized officers to make an informed decision whether to renew, renew with modifications, or not renew the permit. If renewed, the FONSI will describe which management actions, mitigation measures, and monitoring requirements would be prescribed for the Belnap and Big Spring Pipeline allotments to ensure management objectives and Standards for Rangeland Health are achieved.~~

~~The GCPNM interdisciplinary team (IDT) evaluated the application to determine whether the proposed action – providing for livestock grazing opportunities on public land while ensuring that the allotments are achieving (or progressing toward meeting) LHE and REC.~~

1.3 Grand Canyon-Parashant National Monument

Proposed actions within the GCPNM are designed to also ensure the long-term protection of a wide variety of biological objects and a long rich human history, as directed by Presidential Proclamation 7265. This presidential proclamation explains that GCPNM was created because of its “outstanding objects of scientific and historic interest.” The GCPNM is responsible for grazing management of both allotments (BLM 2008a). Designation of the Monument did not, in and of itself, require modification of the current grazing practices. The presidential proclamation states that “Laws, regulations, and policies followed by the BLM in issuing and administering grazing leases on all lands under its jurisdiction shall continue to apply...” (BLM 2008a). Under the Antiquities Act, the BLM must protect objects identified in the presidential proclamation that established the National Monument. Therefore, if the BLM determines that any Monument objects are harmed by current grazing management, then such practices would be modified or eliminated accordingly.

The analysis of impacts to specific resources constitutes the analysis of impacts to monument objects in this EA as stated in the Proclamation “to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and to reserve as a part thereof parcels of land, the limits of which in all cases shall be confined to the smallest area compatible with proper care and management of the objects to be protected (USGPO 2000). Where consistent with the goals and objectives of the RMP and Standards for Rangeland Health, allocation of forage for livestock use and the issuance of grazing permits to qualified applicants are provided for by the TGA and FLPMA.

~~1.5~~ 1.4 Conformance with Land Use Plans

~~1.6~~ 1.5 Relationship to Statutes, Regulations, or Other Plans

~~1.7~~ 1.6 Identification of Issues

2.1 Introduction

The grazing permittee submitted an application to renew the ten-year grazing permit with proposed changes. The IDT explored and evaluated different alternatives to determine whether the underlying need for ~~the proposed action, responding to the permittee’s application providing~~ for livestock grazing opportunities on public lands while ensuring that the allotments are achieving (or progressing toward meeting) rangeland health standards, would be met. This EA analyzes three alternatives including adaptive management of which is a component of each:

2.2 Management Common to All Alternatives

~~The regulations at 43 CFR Part 10 specifically require land use authorizations, including leases and permits, to include a requirement for the holder of the authorization to notify the appropriate Federal official immediately upon the discovery of human remains and other items covered by the Native American Graves Protection and Repatriation Act (NAGPRA) (see 43 CFR 10.4(g); the actual requirement for persons to notify the Federal agency official and protect the discovery~~

is in 43 CFR 10.4(b) and (c)). This requirement is incorporated as a term and condition of any grazing permit that would be issued.

2.3.1 Alternative A – Proposed Action

The proposed action would combine the Belnap and Big Spring Pipeline allotments into one allotment that would ~~then be known as the renamed~~ Big Spring Pipeline Allotment. The Belnap North and South pastures would become the Big Spring Pipeline Allotment North and South pastures (Appendix A, Figure 2). This would include extending the season of use from the current 12/1 – 5/15 use to year-round use in what is now the Belnap Allotment (Table 2.3). This would allow grazing rotation between nine pastures rather than the current seven. The proposal would renew the grazing permit for the Big Spring Pipeline Allotment for a period of ten years. There would be no proposed change in the total number of Animal Unit Months (AUM)², grazing use would be limited to the current active preference and suspended AUMs for either allotment (Table 2.2). Combining the two allotments would necessitate combining the Management Status (see 3.4.1 Livestock Grazing) which is currently improve (I) for the Belnap and maintain (M) for the Big Spring Pipeline allotments. Improve is the more intensive management status of the two categories. The combined allotment ~~Both allotments will~~ become Management Status Improve. The majority of the two allotments have a high productivity potential. This is due to the majority of the acreage being relatively moderate to higher elevations with associated precipitation. The improve status may provide opportunities for positive economic return from public investments. Past investments in range improvements, including structural and vegetation treatments on these allotments recognize the production capability and return on labor and capital investments.

Table 2.2 Current Permitted Livestock Use.

Allotment Number	Allotment Name	Livestock Number and Kind	Season of Use	Percent Public Land ¹	Active AUMs	Suspended AUMs	Total AUMs (Active and Suspended)
AZ04849	Belnap	110 Cattle	12/01 – 05/15	85	516	180	696
AZ04849	Belnap	4 Horses	12/01 – 05/15	85	18	0	18
Total					534	<u>180</u>	714
AZ04870	Big Spring Pipeline	211 Cattle	03/01 – 02/28	92	2337	1429	3766
AZ04870	Big Spring Pipeline	20 Horses	03/01 – 02/28	92	220	0	220
Total					2557	<u>1429</u>	3986

¹Percent public land is based on AUMs.

² An AUM, or Animal Unit Month, is a unit of measurement indicating how much forage is eaten by a cow/calf pair in one month. Approximately 26 lbs. of dry matter.

Table 2.3 Proposed Permitted Livestock Use.

Allotment Number	Allotment Name	Livestock Number and Kind	Season of Use	Percent Public Land ¹	Active AUMs	Suspended AUMs	Total AUMs (Active and Suspended)
AZ04849	Big Spring Pipeline (former Belnap) North and South Pastures	48 Cattle	03/01 – 02/28	85	5164 <u>90</u>	180	6966 <u>70</u>
AZ04849	Big Spring Pipeline (former Belnap) North and South Pastures	4 Horses	03/01 – 02/28	85	184 <u>1</u>	0	184 <u>1</u>
Total					531 <u>534</u>	<u>180</u>	711 <u>714</u>
AZ04870	Big Spring Pipeline	211 Cattle	03/01 – 02/28	92	2337	1429	3755 <u>66</u>
AZ04870	Big Spring Pipeline	20 Horses	03/01 – 02/28	92	220	0	220
Total					2557	<u>1429</u>	3986

¹Percent public land is based on AUMs. *Total Active AUMs in the Belnap Pastures will remain 531 and Active and Suspended 711.

2.3.1.2 Terms and Conditions of Grazing Permit

In addition to the “Mandatory Terms and Conditions” and ~~s~~Standard Terms and Conditions language on the last page of the grazing permit (see Appendix I), the following terms and conditions would be added ~~as to the~~ “Other Terms and Conditions” section on the new grazing permit for the Belnap and Big Spring Pipeline Allotments. Terms and Conditions are requirements that are authorized by land use plans, AMPs (developed through the NEPA process), FLPMA, and Federal regulations (CFRs). Terms and Conditions are agreed to by the permittee during permit issuance. These “Other Terms and Conditions” would be common to both Alternatives A and B:

~~The DPC and vegetation cover objectives as listed in the LHE would be monitored to determine trends. Monitoring utilization of upland key forage plant species over time on the Belnap Allotment/pastures to ensure average utilization of key herbaceous forage species does not exceed 50% for this Allotment. The 50% utilization criteria applies to the Big Spring Pipeline Allotment except for the Lower Cole (Whitmore Canyon), Airstrip, Lava, and Chaparral pastures~~

~~where once 45% average utilization is reached, livestock would be required to move to another pasture or off the allotment (BLM 2008a).~~

2.3.2 Alternative B – No Action

The BLM would ~~renew~~cancel the two existing grazing permits for the Belnap and Big Spring Pipeline Allotments ~~and issue two new ten-year term grazing permits for a period of ten years~~ with no changes. There would be no proposed change in season of use for the Belnap Allotment. Livestock grazing would occur during the current season of use for each allotment, and with the number of AUMs limited to the current active preference (Table 2.2).

2.3.3 Alternative C – No Grazing

Alternative C would ~~cancel~~ ~~reissue~~ the existing grazing permits and issue two ~~ten-year term~~ grazing permits on the Belnap and Big Spring Pipeline Allotments with zero authorized AUMs for active preference; all AUMs would be suspended (i.e., livestock grazing would be deferred for the ten-year permit period). In ten years, the allotments would be re-evaluated. Range improvements would not be maintained by the permittee for this ten-year term.

2.3.4 Alternatives Considered but Not Carried Forward for Analysis

An alternative to permanently close or retire the two subject allotments was considered. During public comments, a commentor suggested that this closure or retirement could be accomplished with a voluntary relinquishment of the grazing permit. The current permittee submitted an application to renew the ten-year livestock grazing permit. The current permittee is not requesting to voluntarily relinquish their grazing permit. The GCPNM RMP Map 2.10 pp 2-78 (BLM 2008) classifies the two subject allotments as open to grazing (see section 1.4 Conformance with Land Use Plans LA-GM-01). This alternative would not meet the purpose and need of this analysis, which is for the BLM to evaluate an application to renew the grazing permit for the two subject allotments for a ten-year term. Substantial use of the grazing permit must be made under 43 CFR §§ 4140.1(a)(2) and 4170.1-2. If this requirement is not met, the permit may be canceled and issued to a qualified permittee that will make substantial use³. Therefore, this alternative was not carried forward for further analysis.

During Public Comment Period, the BLM and NPS considered a proposal to exclude wilderness and proposed wilderness areas from grazing. Permitted grazing remains a potential use of rangelands both including wilderness and proposed wilderness on BLM and NPS lands. Both subject allotments are open to grazing as per the GCPNM RMP (BLM 2008). The Big Spring Pipeline Allotment contains both designated wilderness area and NPS proposed wilderness. The allotment, range improvements, and a continuum of grazing permits issued precede the Arizona Wilderness Act of 1984 (designation of the Mt. Logan Wilderness Area) and the 1976

³ U.S. Court of Appeals for the Tenth Circuit in Public Lands Council v. Babbitt, 167 F.3d 1287 (10th Cir. 1999), aff'd, 529 U.S. 728 (2000). In this decision, the court found that the Secretary of the Interior (acting through the Bureau of Land Management (BLM)) lacked the statutory authority to issue grazing permits intended exclusively for “conservation use.” 167 F.3d at 1308. In 2006, the Department of the Interior promulgated a final rule at 71 FR 39402 (July 12, 2006) that removed references in 43 CFR Part 4100 to conservation use consistent with the court’s ruling.

Wilderness Study Area of 1976 (determined that these NPS lands have wilderness characteristics suitable for wilderness designation). Livestock grazing is authorized under the Wilderness Act; there has been no documentation of excessive damage to resources due to livestock grazing. This proposal to exclude livestock from designated and proposed wilderness areas would require numerous miles maintenance of fencing in heavily timbered areas; and replacement maintenance water developments for a period of 10 years, similar to Alternative C. No range improvements are analyzed in this EA. This alternative was not carried forward for further analysis because it would be infeasible to maintain fencing to keep cattle out of the wilderness areas and to maintain the water developments which provide water for both livestock and wildlife.

The current methodology for LHE and determining if allotments are meeting Arizona Standards and Guides is described in Appendix B. The BLM conducted evaluations for rangeland conditions on the Belnap Allotment (AZ04849) September 30, 2002. An evaluation was conducted on the Big Spring Pipeline Allotment (AZ04870) on May 22, 2006. The IAT determined that the Belnap Allotment met applicable LHE standards. The IAT determined that the Big Spring Pipeline Allotment is making significant progress toward meeting LHE standards. Reasons listed for not attaining LHE standards included extreme drought, coupled with woody species encroachment (pinyon, juniper, and sagebrush) which has limited understory.

In 2022, an interdisciplinary team comprised of both BLM and NPS resource specialists conducted LHE in both allotments utilizing Interpreting Indicators of Rangeland Health, Version 4 (BLM 2005). The team conducted the evaluation on the Belnap Allotment on May 18, 2022, and on the Big Spring Pipeline Allotment on June 9, 2022. Based on these evaluations and long-term monitoring data, the team determined that the Belnap Allotment continues to meet LHE standards and Big Spring Pipeline Allotment continues to make significant progress toward meeting LHE standards. The last two years have witnessed extreme drought on the Arizona Strip, coupled with continued encroachment of woody species which continues to limit understory grasses and forbs in the lower portions of the Big Spring Pipeline Allotment (lower Whitmore Canyon). These factors contribute to the allotment making progress towards, but not completely meeting LHE standards in this allotment. Measures that address rest and/or reduced livestock numbers is detailed in 3.4.1 Livestock Grazing.

Table 3.1 Elements/Resources of the Human Environment

Resource	Determination	Rationale for Determination
Wetlands / Riparian Zones	NI	There are three known springs within the Big Spring Pipeline Allotment. The Big Spring is a developed spring located on private land. There is some riparian area immediately around the spring development, <u>however this spring and riparian area are fenced and not accessible to cattle.</u> Cold Spring is a developed spring on public land that has a small riparian area adjacent to the developed spring. Cold Spring is inaccessible to livestock and not impacted. Randall Spring is an undeveloped spring with no riparian area. There are no known springs within the Belnap Allotment.

Resource	Determination	Rationale for Determination
BLM Designated Wilderness and NPS Proposed Wilderness	PI	The Big Spring Pipeline Allotment includes two types of wilderness; Designated Wilderness (BLM) and proposed wilderness (NPS). The permit renewal portion of the proposed action would continue to allow grazing in the Mt. Logan Wilderness. Grazing practices would continue to be monitored to ensure that no impacts to wilderness values and character occurs. The maintenance of range improvements as part of the alternatives A and B within Designated Wilderness and proposed wilderness requires an assessment of impacts through a Minimum Requirements Decision Guide (MRDG); therefore, this is analyzed in detail later in this EA.

3.4.1 Livestock Grazing

A grazing permit is issued for livestock forage produced annually on public lands and is allotted on an AUM basis. An AUM is a unit of measurement indicating how much forage is eaten by a cow/calf pair in one month. The BLM does not control adjacent private lands owned by the permit holders, or Arizona state managed lands within the allotments. The livestock operator assumes grazing management responsibility with the intent to maintain or improve existing resources. Livestock are to be grazed on public lands only during the established season of use. If private land is used during different periods, it is the permittee's responsibility to keep livestock off the public land during non-grazing periods. The BLM retains the right to manage the public lands for multiple uses and to make periodic inspections to ensure that inappropriate grazing does not occur. If inappropriate grazing should occur, then the BLM would take any necessary and appropriate steps to return the allotment to compliance. There is no prior evidence of trespass livestock on these two allotments.

~~then the BLM would work with the affected permittee to identify and prescribe actions to be taken that would return the allotment to compliance.~~

The improve categorization may be based on any one or several of the above cited criteria. Due to relative higher elevation, the Belnap Allotment exhibits a potential for greater productivity.

The improve status may provide opportunities for positive economic return from public investments. The intent of management under the Improve category is to provide for enhanced opportunities to create better grazing conditions. Past investments in range improvements, including structural and vegetation treatments on this allotment recognize the production capability and return on labor and capital investments.

Actual Use

Actual use is submitted by the permittee annually to reflect the number of livestock, pasture rotation, and season of use for that grazing year. AUMs are calculated from the actual use reports, as well as billing for grazing on public lands. The actual use within the Belnap Allotment has ranged from 0 (non-use) – 86% of permitted use in the past decade (2012 – 2022) with an average for that period of 36%. Actual use for the Big Spring Pipeline Allotment ranged from 13 – 47% of permitted use during 2012 – 2022 with an average for that period of 30%.

Non-use may reflect seasonally dry periods, drought years, or annual operation fluctuation where the BLM and permittee have coordinated for reduced numbers. The permittee for the past ~~two-
couple of~~ decades has been removing over 50% of their livestock from public lands during the majority of the vegetation growing season. In the past decade this has increased to removal of over 64% for both allotments during the growing season.~~their livestock from public lands during the majority of the vegetation growing season.~~ This is evident from the Actual Use submitted which date back to the mid-1980s for both allotments. Actual Use for the period when the livestock remained on the Big Spring Pipeline and Belnap allotments through the growing season is approximately 54-59% (respective, of permitted use i.e., 40+% non-use). Actual use tables can be found in Appendix C, Table C.1 Belnap Allotment Actual Use and Table C.2 Big Spring Pipeline Actual Use. The proposal to convert the Belnap Allotment to a year-round grazing allotment will likely not affect current utilization or Actual Use levels, as it is evident that the livestock will not be on either allotment during the majority of the growing season. This proposal will allow the permittee additional flexibility to better manage their livestock for the period they are on the allotments. If cattle are on the allotment during the growing season, the nine pasture deferred rotational grazing system would provide rest. Any changes in utilization patterns and trend would be detected through monitoring. Adaptive Management would be a tool that the BLM would use if data indicates a change is merited (see section 2.2.2).

Utilization

Utilization is defined as the proportion of the current year's forage production that is consumed or destroyed by grazing animals (both livestock and wildlife). The Grazed-Class Method was used to collect the data (Section 4.3.4 Monitoring). Average utilization levels of key forage species for these allotments should not exceed 50% in the Belnap Allotment, and the Big Spring Pipeline summer pastures. Utilization should not exceed 45% on the Big Spring Pipeline winter pastures (see 2.3.1 for specific grazing system) (BLM 2008a). Utilization as well as compliance checks are conducted throughout the grazing season. There are two key areas in the Belnap Allotment (one in each pasture, see Appendix A, Figure 3). There are seven key areas in the Big Spring Pipeline Allotment (See Appendix A, Figure 4). Average utilization for the Belnap Allotment (1991 – 2022) ranges from no use to 42%. Utilization data by key area and year is available in Appendix C, Utilization Table C.3 and C.4 for the Belnap Allotment. Appendix C, Utilization Tables C.5 – C.10 shows utilization from 1991 - 2022 for the Big Spring Pipeline Allotment. Average utilization ranges from no use to 39%. Average utilization did not exceed 50% on any of the key areas in either allotment. However, there have been four occasions in the Big Spring Pipeline Allotment in the past decade when utilization exceeded the 50 percent threshold on a key species in an individual pasture (see Appendix C). The permittee was made aware of this and this is not considered a chronic problem as it was exceeded by two to six percentage points. The ability to rotate to additional pastures would likely address this issue.

4.2.2.1 Direct and Indirect Impacts of Alternative A – Proposed Action

The Proposed Action would directly affect livestock grazing~~the grazing permittee~~ on the Belnap and Big Spring Pipeline Allotments by renewing the ten-year term grazing permit with new terms and conditions. See Appendix I for both Standard Terms and Conditions and the current permit's Other Terms and Conditions. The action would issue a new term grazing permit that would combine the Belnap and Big Spring Pipeline Allotments into one Big Spring Pipeline

Allotment with year-round grazing use. This would create a nine-pasture rotation. When 45% forage utilization is reached in the Whitmore Canyon winter unit pastures (the Lower Cole (Cold Spring), Airstrip, Lava, and Chaparral pastures), or 50% in the remaining summer use pastures, including the North and South pastures (previously Belnap North and South pastures), livestock will be moved to another pasture or off the allotment completely. There would be no change in the total number of AUMs authorized. The current active AUMs for each allotment (see Table 2.2 Alternative B) would be combined as were the suspended AUMs for each allotment (see Table 2.3 Alternative A). The proposed action would allow flexibility with a nine-pasture rotation. The former Belnap North and South pastures would be used in conjunction with the current seven Big Spring Pipeline pastures. This would allow greater rest specifically for the Big Spring Pipeline winter unit pastures (the Lower Cole (Cold Spring), Airstrip, Lava, and Chaparral pastures). The majority of the livestock are currently removed from the Big Spring Pipeline Allotment, and likely would be in the newly created North and South pastures (current Belnap pastures), for the growing season. This practice will continue and allows total rest during the growing season for all pastures. This allows vegetation on the allotment to mature, produce seed, and disseminate seed with only grazing pressures from wildlife from mid-May through September in most years.

These changes would improve long-term livestock management on the combined allotment. Permit renewal would provide some degree of stability for the permittee's livestock operation. Permit renewal would also meet the purpose and need for action identified in Chapter 1 of this EA – to provide for livestock grazing opportunities on public lands where consistent with meeting management objectives, including the Arizona Standards for Rangeland Health and Guidelines for Livestock Grazing Management (Appendix B) and the GCPNM RMP/GMP (BLM 2008a), and respond to applications to fully process and issue ~~renew~~ permits to graze livestock on public land.

4.2.1.2 Direct and Indirect Impacts of Alternative B – No Action

The No Action alternative would affect ~~the livestock grazing permittee~~ on the Belnap and Big Spring Pipeline Allotments by issuing a ~~renewing the~~ ten-year term grazing permit with no changes. This action would maintain the current level of livestock grazing authorized for the permittee for ten years, which would result in a continued viable ranching operation for the livestock operator and provide some degree of stability for the permittee's livestock operation (Table 2.2). The No Action alternative would leave the two allotments separate. The season of use for each allotment would not change, it would remain different for each allotment (Table 2.2). Allowable use on key forage species would remain at 45% for Big Spring Pipeline winter unit pastures; 50% for the remaining Big Spring Pipeline pastures and Belnap Allotment pastures. There would be no change in the current terms and conditions. Permit renewal would partially meet the purpose and need for action identified in Chapter 1– to provide for livestock grazing opportunities on public lands where consistent with meeting management objectives, and to respond to the application to fully process and renew the permit to graze livestock on public land. However, this alternative would not provide the permittee with the flexibility and improved operation management as they have requested.

4.2.1.3 Direct and Indirect Impacts of Alternative C- No Grazing

This alternative would ~~negatively affect~~disallow the livestock grazing ~~permittee~~ on the Belnap and Big Spring Pipeline Allotments by not authorizing any active preference under the term grazing permits. The action would cancel the current level of livestock grazing numbers and season of use authorized. This would not provide current or future use, stability, and compatibility for the permittee's livestock operation because they would not be authorized to use the allotment. ~~This permittee could~~ would force them to seek alternate arrangements for their herds, such as leasing private pasture or obtaining federal grazing permits on a different allotment which would be challenging, and potentially economically not feasible. These alternate arrangements could be economically infeasible for the permittee. ~~It would most likely put this livestock operation out of business.~~

~~This alternative would not meet the purpose and need for action identified in Chapter 1 to provide for livestock grazing opportunities on public lands where consistent with meeting management objectives, including the Arizona Standards for Rangeland Health and Guidelines for Livestock Grazing Management (Appendix B), as well as the GCPNM RMP/GMP (BLM-2008a), and the need to respond to applications to fully process and renew permits to graze livestock on public land.~~

4.3.1 Cumulative Impacts to Livestock Grazing

In response to these problems, livestock grazing reform began in 1934 with the passage of the Taylor Grazing Act. Subsequent laws, regulations, and policy changes have resulted in adjustments in livestock numbers, season-of-use changes, and other management changes. Given the past experiences with livestock impacts on public land resources, as well as the cumulative impacts that could occur on the larger ecosystem from grazing on various public and private lands in the region, management of livestock grazing is an important factor in ensuring the protection of public land resources. Past, present, and reasonably foreseeable actions within the analysis area (see section 3.4.3 and Appendix G) would continue to influence range resources, watershed conditions and trends. The impact of actions such as voluntary livestock reductions during dry periods and implementation of a grazing system have improved range conditions. The net result has been greater species diversity, improved plant vigor, and increased ground cover from grasses and forbs.

The effects on livestock grazing in the Belnap and Big Spring Pipeline allotments have been analyzed under the "Direct and Indirect Effects" section 4.2.1 of this chapter. In addition to livestock grazing, there are a wide variety of uses and activities occurring on the lands within and adjacent to the allotment, as described ~~above~~below.

4.3.4 Cumulative Impacts to Designated and Proposed Wilderness

There have been approximately 711 acres of wildfires that have occurred within the Mt. Logan Wilderness within the past 40 years. These wildfires are often attributed to lightning starts and are a natural occurrence; if the fires do not threaten life or property, they are monitored and may be allowed to burn.

There are historic vegetation treatments within the Mt. Logan Wilderness Area. These

treatments predate the passage of the Wilderness Act or designation of the Mt. Logan Wilderness Area. There is approximately 863 acres of these historic treatments within the Mt. Logan Wilderness Area that was mechanically treated in 1960 (see 3.4.3.1 Historic Vegetation Treatments; Table 3.5 Big Spring Pipeline Allotment – Historic Vegetation Treatments; see also Appendix A Figure 6, depicts historic treatments within allotment including Mt. Logan Wilderness Area. As these treatments occurred over 60 years ago, it is unlikely they are still visible to the casual observer.

Existing range improvements are also depicted in Appendix G (maps) Existing Range Improvements. Specifically see Table G.7. Existing Range Improvements within Designated or Proposed Wilderness Area. As with the mechanical treatments, these range improvements predate designation of the Mt. Logan Wilderness Area. The potential maintenance of range improvements is fully analyzed in section 4.2.4 Designated and Proposed Wilderness as well as Appendix D – Minimum Requirements Decision Guide (MRDG).

There is a proposal to re-route the BLM 1045 road that currently goes through a private ranch located within the Big Spring Pipeline project area. The BLM has been unable to obtain a right-of-way for the portion of this road within this private in-holding. The 1045 road proposal is analyzed under a separate EA and would re-route the road from private land to BLM Public Land to allow continued public access to Whitmore Overlook and the Colorado River.

4.3.6 Other Foreseeable Activities within Project Area

There is a proposal to re-route the BLM 1045 road that currently goes through a private ranch located within the Big Spring Pipeline project area. The BLM has been unable to obtain a right-of-way for the portion of this road within this private in-holding. The 1045 road proposal is analyzed under a separate EA and would re-route the road from private land to BLM Public Land to allow continued public access to Whitmore Overlook and the Colorado River.

5.2 Summary of Public Participation

A 15-Day Public Scoping Comment period was posted on the BLM's ePlanning and the NPS PEPC on February 27, 2023. Ten scoping comment letters were received, those comments and responses are in Appendix J. A Notice of Public Comment Period letter announced that the preliminary draft EA was available for review and comment for a 30-day public comment period from May 26 through June 26, 2023. Fifteen comment letters were received. A summary of the of those public comments and responses are shown in Appendix K below.

Appendix C – Belnap and Big Spring Pipeline Utilization and Monitoring Data

Belnap Allotment Updated Monitoring Data

Actual Use

Actual use as reported by the permittee annually. Actual use was determined by annual actual use reports submitted to BLM. Actual use is submitted by the permittee annually to reflect the number of livestock, pasture rotation, and season of use for that grazing year. AUMs are

calculated from the actual use reports, as well as billing for grazing on public lands. The actual use within the Belnap Allotment has ranged from 0 (non-use) – 86% of permitted use in the past decade (2012 – 2022) with an average for that period of 36%. Non-use may reflect seasonally dry periods, drought years, or annual operation fluctuation. The permittee for the past couple of decades has been removing over 50% of their livestock from public lands during the majority of the vegetation growing season. In the past decade this has increased to removal of over 64% for both allotments during the growing season. This is evident from the Actual Use submitted which date back to the mid-1980s for both allotments. This is also evident in forage utilization reductions determined by field monitoring (see Tables C.3 to C.10). Total active preference for the allotment is 734 AUMs. Average annual AUMs used, during the ten years 2010 – 2020, was 573 which is 78% of the total available. AUMs used ranged from 65% in 2013 to 90% in 2012. Actual use was determined by annual actual use reports submitted to BLM. Total active preference for the allotment is 2,671 AUMs through 2006. In 2006, one pasture was transferred from this permittee and allotment which reduced the AUMs to 2557.

In the past decade, the permittee transports most of their cattle from public lands to private pasture between mid-spring to late summer. This gives all pastures in both the Belnap and Big Spring Pipeline allotments rest through the majority of the growing season.

Actual use for the Big Spring Pipeline Allotment ranged from 13 – 47% of permitted use during 2012 – 2022 with an average for that period of 30%. Total active preference for the allotment is 2,671 AUMs through 2006. In 2006, one pasture was transferred from this permittee and allotment which reduced the AUMs to 2557.

Appendix H - Big Spring Pipeline Allotment Management Plan (AMP) Developed in 1988; and Revised 1990.

Insert in final EA:

<https://doimspp.sharepoint.com/sites/GCPNMIDTeam/Shared%20Documents/General/CXs-DNAs-EAs/2023/DOI-BLM-AZ-A030-2023-XXXX-EA-Belnap%20and%20Big%20Spring%20Pipeline%20GPR/other/Big%20Spring%20Pipeline%20AMP%201994.pdf>

Appendix I – Livestock Grazing Standard Terms and Conditions

TERMS AND CONDITIONS **APPLICABLE TO ALL** **PERMITS AND LEASES**

1. Grazing permit or lease terms and conditions and the fees charged for grazing use are established in accordance with the provisions of the grazing regulations now or hereafter approved by the Secretary of the Interior.
2. They are subject to cancellation, in whole or in part, at any time because of:
 - a. Noncompliance by the permittee/lessee with rules and regulations.
 - b. Loss of control by the permittee/lessee of all or a part of the property upon which it is

based.

- c. A transfer of grazing preference by the permittee/lessee to another party.
 - d. A decrease in the lands administered by the Bureau of Land Management within the allotment(s) described.
 - e. Repeated willful unauthorized grazing use.
 - f. Loss of qualifications to hold a permit or lease.
3. They are subject to the terms and conditions of allotment management plans if such plans have been prepared. Allotment management plans MUST be incorporated in permits or leases when completed.
4. Those holding permits or leases MUST own or control and be responsible for the management of livestock authorized to graze.
5. The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze.
6. The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.
7. Grazing permits or leases are subject to the nondiscrimination clauses set forth in Executive Order 11246 of September 24, 1964, as amended. A copy of this order may be obtained from the authorized officer.
8. Livestock grazing use that is different from that authorized by a permit or lease MUST be applied for prior to the grazing period and MUST be filed with and approved by the authorized officer before grazing use can be made.
9. Billing notices are issued which specify fees due. Billing notices, when paid, become a part of the grazing permit or lease. Grazing use cannot be authorized during any period of delinquency in the payment of amounts due, including settlement for unauthorized use.
10. The holder of this authorization must notify the authorized officer immediately upon the discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (cultural items), stop the activity in the area of the discovery and make a reasonable effort to protect the remains and/or cultural items.
11. Grazing fee payments are due on the date specified on the billing notice and MUST be paid in full within 15 days of the due date, except as otherwise provided in the grazing permit or lease. If payment is not made within that time frame, a late fee (the greater of \$25 or 10 percent of the amount owed but not more than \$250) will be assessed.
12. Members of Congress may not enter into a grazing permit or lease. 41 USC 6306 (2014). Further, no officer, agent, or employee of the Department of the Interior, other than members of Advisory committees appointed in accordance with the Federal Advisory

Committee Act (5 U.S.C. App. 1) and Sections 309 of the Federal Land Policy and Management Act of 1976 (42 U.S.C. 1701 et. seq.) shall be admitted to any share or part in a permit or lease for grazing or derive any benefit to arise from a permit or lease for grazing.

Other Terms and Conditions for Current Belnap and Big Spring Pipeline Allotments Grazing Permit.

BELNAP ALLOTMENT - AZ04849

- THIS PERMIT OR LEASE IS ISSUED UNDER THE AUTHORITY OF SECTION 402(C)(2) OF FLPMA 1976 AS AMENDED, AND CONTAINS THE SAME TERMS AND CONDITIONS AS THE PREVIOUS PERMIT OR LEASE.

- THIS PERMIT OR LEASE MAY BE CANCELED, SUSPENDED, OR MODIFIED, IN WHOLE OR IN PART TO MEET THE REQUIREMENTS OF APPLICABLE LAWS AND REGULATIONS.

-AN AMP WILL BE PREPARED IN CONSULTATION WITH YOU AND WHEN IMPLEMENTED, WILL BE INCLUDED AS TERMS AND CONDITIONS OF YOUR GRAZING PERMIT.

-AS PROVIDED BY 43 CFR 4130.3-1(B), THIS PERMIT SHALL BE SUBJECT TO CANCELLATION, SUSPENSION, OR MODIFICATION FOR ANY VIOLATION OF THE REGULATIONS OF 43 CFR PART 4100 OR OF ANY TERM OR CONDITION OF THIS PERMIT.

-THE PERMITTEE WILL BE ALLOWED TO USE AN ACTUAL USE BILLING SYSTEM. THIS PRIVILEGE MAY BE REVOKED AND THE PERMITTEE PLACED ON ADVANCED BILLING IF PAYMENT OF BILLS AND ACTUAL USE REPORTS ARE LATE.

-AN ACTUAL GRAZING USE REPORT (FORM 4130-5) MUST BE SUBMITTED WITHIN 15 DAYS AFTER COMPLETING YOUR ANNUAL GRAZING USE.

-RANGE IMPROVEMENTS ASSIGNED IN COOPERATIVE AGREEMENTS AND RANGE IMPROVEMENT PERMITS MUST BE MAINTAINED IN USABLE CONDITION EACH YEAR. THIS ALSO INCLUDES WILDLIFE ESCAPE RAMPS FOR BOTH PERMANENT AND TEMPORARY WATER TROUGHS.

-ANY HAY OR OTHER FEED USED IN ADMINISTERING THE LIVESTOCK OPERATION WILL BE CERTIFIED WEED-FREE AND MUST BE APPROVED BY THE AUTHORIZED REPRESENTATIVE PRIOR TO USE.

-USE OF NUTRITIONAL LIVESTOCK SUPPLEMENTS IS ALLOWED, INCLUDING PROTEIN, MINERALS AND SALT. HOWEVER, ANY SUPPLEMENT USED MUST BE DISPERSED AT A MINIMUM OF 1/4 MILE FROM ANY KNOWN WATER SOURCES, RIPARIAN AREAS, POPULATIONS OF SPECIAL STATUS PLANT SPECIES, WINTERFAT DOMINATED SITES, CULTURAL OR ANY OTHER SENSITIVE SITES.

BIG SPRING PIPELINE ALLOTMENT - AZ04870

-THIS PERMIT OR LEASE IS ISSUED UNDER THE AUTHORITY OF SECTION 402(C)(2) OF FLPMA 1976 AS AMENDED, AND CONTAINS THE SAME TERMS AND CONDITIONS AS THE PREVIOUS PERMIT OR LEASE.

-THIS PERMIT OR LEASE MAY BE CANCELED, SUSPENDED, OR MODIFIED, IN WHOLE OR IN PART TO MEET THE REQUIREMENTS OF APPLICABLE LAWS AND

REGULATIONS.

-USE SHALL BE IN ACCORDANCE WITH THE BIG SPRING PIPELINE AMP. BILLING
WILL BE AFTER THE FACT BASED ON ACTUAL USE. PERMITTEE WILL KEEP
ACCURATE ACTUAL USE RECORDS AND SUBMIT AN ACTUAL USE REPORT ON OR
BEFORE NOVEMBER 15 EACH YEAR.

Appendix H – Public Scoping Comment and Response Table.

Commenter Name	Comment Category	Comment	Response
Spotts Anonymous	Biological Soil Crust	Comments were received regarding protection and preservation for Biological Soil Crusts (BSC). “Over the next ten years, how would livestock grazing contribute to the loss of essential biological soil crusts?”	Frequency trend monitoring of key areas includes detection and monitoring of BSC. Trend of BSC is taken into account when determining the long-term trend for a site, see Appendix C, Tables C11 – C20.
WPP Spotts	Issues - Impact Analysis	Comments concerning climate change and drought. “drought and climate impacts are a concern” “Please review the attachments that provide relevant information on the climate change and other adverse impacts from commercial livestock grazing on public lands.” “During the prolonged drought over the past decade, to what extent was livestock grazing on these allotments reduced or suspended?”	Climate change is a global phenomenon that is thought to results from a multitude of factors, including global GHG emissions. GHGs include water vapor, carbon dioxide, nitrous oxide, methane, and carbon monoxide. Projected climate change impacts include air temperature increases and decreases, sea level rise, changes in the timing, location, and quantity of precipitation, and increased frequency of extreme weather events such as heat waves, droughts, and floods. These changes would vary regionally and affect renewable resources, aquatic and terrestrial ecosystems, and agriculture. The proposed alternatives would be a minute source of carbon dioxide (CO ₂) and other GHGs, which would have a negligible effect on local, regional, and global climate change.
Ingram	Multiple Use	“A single commercial use for this Grand Canyon related region, when there are so many other national options for grazing, needs considerably more justification than is indicated by just a plan for nine pastures.”	See Table 3.1 for section addressing recreation. See 3.4.3 Wilderness and 4.2.3 Wilderness sections and Appendix D for MRDG.

Comme nter Name	Comment Category	Comment	Response
		<p>“It is not apparent that the grazing activities and priorities in the area indicated in the scoping notice give proper acknowledgement to the matter of protection of park-value and recreation resources for the area.”</p>	

Appendix B: Response to Substantive Public Comments

(Appendix K in the EA)

Substantive comments are organized by issue in the table. Comments in common to several groups or individuals were combined into one comment, where applicable, and subsequently addressed in one response. Comments received after the comment period closed were not considered. Several comments contained non-substantive or open-ended questions. Per the BLM NEPA Handbook and NPS NEPA Handbook these did not receive a response. The GCPNM is interagency managed by the BLM and NPS. The allotment is not divided by agency managed lands, rather geographical as well as allotment and pasture fencelines. Comments addressed to one agency may affect lands managed by both agencies, therefore, is included in the comment and response table and this NPS FONSI.

Comment No.	Commenter	Comment Category	Comment	Response
EA-1	Western Watersheds Project	Range of Alternatives	<p>The range of alternatives remains insufficient. We once again strongly recommend the Bureau consider an alternative that would close the allotment and retire the permit. Additionally, the Bureau should include a voluntary grazing permit retirement provision in all action alternatives that would allow livestock grazing at any level and/or reissue the permit. We once again suggest the following language:</p> <p>As part of this alternative the Bureau will consider an analyze the permanent retirement of grazing allotments that are voluntarily waived by the permittee for permanent resource protection. The option of permanent voluntary retirement of permits and associated grazing privileges represents an equitable solution to wildlife and other natural resource conflicts with agricultural operations on public lands. It</p>	<p>The EA includes three alternatives that are fully analyzed, including 2.3.3 Alternative C - No Grazing alternative. The three alternatives are fully analyzed in Chapters 3 and 4 of the EA. The permittee has not requested "voluntary" retirement of their livestock grazing permit.</p> <p>The permittee submitted an application to renew their grazing permit with the change of season described in 2.3.1 Alternative A - Proposed Action. See 1.2 Purpose and Need.</p>

Comment No.	Commenter	Comment Category	Comment	Response
			<p>provides security to livestock producers facing declining economic returns, increasing price instability, a shrinking available workforce, and other challenges, and allows the Bureau to redesignate lands to other uses, including wildlife habitat, recreation, and hunting, which is especially important on NLCS lands such as those found in the Grand Canyon-Parashant National Monument. The permit waiver system represents the increasing public interest in maintaining natural systems and restoring native species, and allows land managers to facilitate the win-win resolution of grazing conflicts which impact not only native species, but also water quality and the recreational experience of users.</p> <p>There is ample legal precedent for permanent retirement of livestock grazing on some public land areas through NEPA analysis (reflecting the will of the public owners of the land) and any number of other administrative policy and regulation applications on many public lands. Examples of where livestock can be excluded or retirement may be applicable include, but are not limited to: designation of administrative areas, recreational areas, where mining may and may not occur, archaeological areas,</p>	

Comment No.	Commenter	Comment Category	Comment	Response
			bighorn sheep habitat, protection for species listed under the endangered species act. It is clear that this area is not well suited for livestock grazing and considering permit retirement should be on the table.	
EA-2	Wilderness Watch	Range of Alternatives	The EA fails to look at allotment boundary adjustments, removal of some range infrastructure, or moving infrastructure to other places in the allotment. The two action alternative have the same number of AUMs. There is no reasonable or even adequate range of alternatives.	The EA includes three alternatives that are fully analyzed, including 2.3.3 Alternative C - No Grazing alternative. Existing range improvements will be evaluated for abandonment or re-location prior to maintenance. Prior to maintenance, range improvements will be evaluated for maintenance, abandonment, or re-location.
EA-3	Western Watersheds Project	FLPMA – NEPA – TGA	We are concerned that the Bureau is likely to proceed to a Finding of No Significant Impact (FONSI) despite the obvious significant negative impacts livestock grazing is having on natural and cultural resources in the area (as demonstrated by the failure to meet rangeland health standards or desired plant community objectives). The significant impacts would indicate a FONSI is not feasible.	The determination on whether to prepare an EIS vs. an EA is determined by whether effects are expected to be significant. After consideration of the environmental effects described in the EA and supporting documentation, the BLM determined that the actions are not a major Federal action and will not have a significant effect on the quality of the human environment, either individually or cumulatively with other actions in the area. No environmental effects meet the (40 CFR 1501.3(b)(2)) Council on Environmental Quality's criteria for the degree of the effects. Our analysis of these criteria within this EA led the decision makers to conclude

Comment No.	Commenter	Comment Category	Comment	Response
				that the level of effects of the alternatives identified did not require an EIS.
EA-4	Western Watersheds Project	FLPMA – NEPA – TGA	In addition, the sheer length of this EA indicates the Bureau should proceed to an Environmental Impact Statement to more fully understand the level of degradation this decision will bring.	While the CEQ regulations do recommend that EAs be 10-15 pages, the Code of Federal Regulations (40 CFR) § 1501.5 Environmental assessments states “(f) The text of an environmental assessment shall be no more than 75 pages, not including appendices, unless a senior agency official approves in writing an assessment to exceed 75 pages and establishes a new page limit.”. This EA is below that 75-page limit
EA-5	Western Watersheds Project	FLPMA – NEPA – TGA	Flawed analysis. The analysis of the actual use is incorrect. Appendix C, at page 1, describes the actual use for the Belnap allotment, including a chart, and states that “Average annual AUMs used, during the ten-years 2010-2020, was 573 which is 78% of the total available.” This is miscalculated (...). The alternative development and decision-making for this grazing authorization are based on what is clearly a flawed analysis and flawed information. This is a clear NEPA violation and the Bureau cannot proceed to a FONSI based on the information in this EA.	Two digitally corrupt maps in Appendix A and "legacy" utilization and monitoring language were inadvertently included in Appendix C - Actual Use. The maps and the language have been corrected – see updated appendices. Due to providing the wrong information, the BLM extended the comment period for 10 days to address this and the two digitally corrupt maps
EA-6	American Concerned About	FLPMA – NEPA – TGA	I am very concerned about commercial livestock grazing on BLM public lands,	Livestock grazing is a potential multiple use of public lands managed by the BLM, as provided for by the TGA,

Comment No.	Commenter	Comment Category	Comment	Response
	Harmful Grazing		<p>especially in national monuments like the GCPNM.</p> <p>BLM always finds ways to deny, avoid, or circumvent the real problems. I know that BLM has an unfair bias for ranchers and grazing and against resource conservation. This traditional bias taints BLM's data and NEPA documents because they may be skewed for political expediency.</p>	<p>FLPMA, and the Public Rangelands Improvement Act (PRIA), as amended. Regulations controlling livestock grazing on public lands are found in 43 CFR 4100.0-2. Section 1.4 Conformance with Land Use Plans elaborates on the specific Management Actions authorized by the RMP/GMP and associated Record of Decisions that are applicable to grazing on NPS managed lands as well as additional specific livestock grazing guidance for both NPS and BLM administered lands. Section 1.5 Relationship to Statutes, Regulations, or Other Plans identifies the authority granted by the Proclamation creating GCPNM allowing for the continuing issuance of grazing leases.</p>
EA-7	<p>Name or Organization Not Provided</p> <p>BLM Grazing Reforms Needed</p>	FLPMA – NEPA – TGA	<p>Attachment: Million Cattle Graze on Federal Land for Almost Nothing, but the Cost to the Climate Could Be High</p> <p>Cattle grazing on BLM lands is a bad deal for Americans on both environmental and economic grounds. Millions of acres of BLM rangelands are degraded by this grazing. And the public unfairly subsidizes this degradation of their public lands. BLM should stop promoting further grazing and instead focus on restoring degraded rangelands. I agree</p>	<p>FLPMA, enacted in 1976, established the multiple-use mandate for federal public lands to serve present and future generations. FLPMA further defines “principal and major uses” of federal public land to include livestock grazing. When enacting FLPMA, Congress expressly protected the grazing permit system first contemplated in the TGA. (Leonard 2019). The authority to amend these laws remains with Congress (see 2.3.4 Alternatives considered but not carried forward for analysis). The federal grazing fee is currently</p>

Comment No.	Commenter	Comment Category	Comment	Response
	American Concerned About Harmful Grazing		<p>with the attachment that significant grazing reforms are long overdue. Attachment: Million Cattle Graze on Federal Land for Almost Nothing.pdf</p> <p>I believe that significant BLM grazing reforms are urgently needed. BLM's own records indicate that over 50 million acres of grazed BLM lands are not even meeting BLM's own minimum standards for rangeland health. And now over half of BLM ten year grazing permits are renewed without NEPA analysis or public involvement.</p>	<p>set using the Public Rangeland Improvement Act (PRIA) fee formula established in 1978 and modified in 1986. Grazing fees are adjusted nationally on an annual basis using this formula that factors the average annual change in beef cattle prices, leasing rates for grazing on private land in the western states, and the costs of livestock production. Congress retains the authority to change the grazing fee formula.</p> <p>The GCPNM has completed NEPA analysis on most of the grazing permits that we manage.</p> <p>Please see 3.2.3 Land Health Evaluation for LHE discussion.</p>
EA-8	Wilderness Watch	FLPMA – NEPA – TGA	<p>The following factors point to the need for an EIS:</p> <ul style="list-style-type: none"> • Wilderness and the Monument • the ongoing severe drought • failure to meet all land health parameters 	<p>Action whose effects are expected to be significant and are not fully covered in an existing EIS must be analyzed in a new or supplemental EIS (516 DM 11.89A)) BLM NEPA Handbook (H-1790-1). These actions have been approved by the GCPNM RMP/GMP. This EA analyzes designated and proposed wilderness (see sections 3.4.4 and sections in Chapters 4) A MRDG (Appendix D) is a documented process used to determine if administrative actions, projects, or programs undertaken by the Service or its agents and affecting wilderness character,</p>

Comment No.	Commenter	Comment Category	Comment	Response
				<p>resources, or the visitor experience are necessary, and if so how to minimize impacts.” Grazing is an acceptable action in both Monuments and in designated and proposed wilderness.</p> <p>The majority of ASDO livestock grazing permittees voluntarily reduced cattle numbers by 50% or more during the recent drought. This includes the permittee for the two subject allotments. As stated in 2.3.1 Alternative A – Proposed Action, this permittee annually removes the majority of their cattle to private pasture lands to rest the public lands during the growing season.</p> <p>To further address additional comment bullets, see the sections addressing Wilderness, Monument Objects, and Rangeland Health Conditions for further information.</p>
EA-9	Wilderness Watch	FLPMA – NEPA – TGA	<p>All this leads up to a major flaw in the EA/MRDG. It fails to comply with the BLM Manual on Wilderness: 3. NEPA Compliance</p> <p>In conformance with BLM Handbook H-1790-1, Appendix 5, if any of the "extraordinary circumstances" are applicable to the action being considered, either an EA or an EIS must be prepared for the action. Among these</p>	<p>An EA was prepared instead of a Categorical Exclusion (CX) the EA is sufficient because it analyzed potential impacts to designated and proposed wilderness. See sections 3.4.4 and 4.2.4 for the detailed, site-specific analysis of the three alternatives, including 2.3.3 Alternative C - No Grazing alternative.</p> <p>After consideration of the environmental effects described in the EA and</p>

Comment No.	Commenter	Comment Category	Comment	Response
			"extraordinary circumstances" are actions that may "have significant impacts on...wilderness areas." The BLM interprets this language to mean that a categorical exclusion cannot be used to approve any action in a wilderness that would authorize a use listed in 1.6.B.2 of this manual: any commercial enterprise or service; any permanent or temporary road; the use of any motor vehicle, motorized equipment, or motorboat; the landing of any aircraft or the picking up or dropping off of people or material from an aircraft; the use of any other form of mechanical transport; the building or placement of any structure or installation. In addition, a categorical exclusion cannot be used to approve any action in a wilderness that may have a significant impact to wilderness character.	supporting documentation (MRDG), the BLM determined that the actions are not a major Federal action and will not have a significant effect on the quality of the human environment, either individually or cumulatively with other actions in the area. No environmental effects meet the (40 CFR 1501.3(b)(2)) Council on Environmental Quality's criteria for the degree of the effects. Our analysis of these criteria within this EA led the decision makers to conclude that the level of effects of the alternatives identified did not require an EIS.
EA-10	Western Watersheds Project	FLPMA – NEPA – TGA	Western Watersheds Project once again encourages the Bureau and the Park Service to carefully consider the appropriateness of livestock grazing in these arid lands in light of the changed circumstances related to drought and climate change. We strongly encourage the agencies to engage the public fully in the NEPA process and provide more robust public comment periods in the future.	See Chapter 3.4.1 Livestock Grazing and Table 3.1 to see resources analyzed and discussion regarding climate change and drought. Also, drought discussion, 4.3.1 Cumulative Impacts to Livestock Grazing. A 15 day public scoping period to solicit input on the Belnap and Big spring Pipeline EA was available on PEPC and ePlanning sites beginning February 27, 2023. We

Comment No.	Commenter	Comment Category	Comment	Response
				received ten scoping comments that are available in the EA Appendix J. A 30 day public comment period was posted beginning May 26, 2023. This posting included the EA, with associated tables, MRDG, and maps. This period was extended to July 12.
EA-11	Wilderness Watch	FLPMA – NEPA – TGA	<p>4. Public Notification Field office managers must provide public notice of proposed actions within wilderness areas. Notification should occur as soon as practicable, such as when the purpose and need for a proposal (which may be the same as the "purpose and need" for purposes of NEPA) is defined. Notification may occur through the agency website, local media, and the use of mailing lists of interested parties. In certain instances, such as projects with regional or national interest, Federal Register publication may also be warranted. Any substantive comments from the public (e.g. NEPA scoping comments), solicited or not, should be considered during the NEPA process."</p> <p>The notice should include enough information for the recipient to understand the purpose, location, nature, size, and expected implementation date of the proposed action.</p> <p>BLM Manual 6340 1.6(D)(3</p>	<p>A 15 day public scoping period to solicit input on the Belnap and Big spring Pipeline EA was available on PEPC and ePlanning sites beginning February 27, 2023. We received ten scoping comments that are available in the EA Appendix J. A 30 day public comment period was posted beginning May 26, 2023. This posting included the EA, with associated tables, MRDG, and maps. This period was extended to July 12.</p> <p>The BLM has complied with the development of an EA, and through the offering of both a public scoping period and a public comment period as described above for this livestock grazing permit EA. BLM Manual 6340 1.6(D)(3 and 4) at 1-65 and 1-66, state: 3. NEPA Compliance In conformance with BLM Handbook H-1790-1, Appendix 5, if any of the "extraordinary circumstances" are applicable to the action being considered, either an EA or an EIS must be prepared for the action. Among these "extraordinary circumstances"</p>

Comment No.	Commenter	Comment Category	Comment	Response
			and 4) at 1-65 and 1-66, emphasis added.	<p>are actions that may “have significant impacts on...wilderness areas.” The BLM interprets this language to mean that a categorical exclusion cannot be used to approve any action in a wilderness that would authorize a use listed in 1.6.B.2 of this manual: any commercial enterprise or service; any permanent or temporary road; the use of any motor vehicle, motorized equipment, or motorboat; the landing of any aircraft or the picking up or dropping off of people or material from an aircraft; the use of any other form of mechanical transport; the building or placement of any structure or installation. In addition, a categorical exclusion cannot be used to approve any action in a wilderness that may have a significant impact to wilderness character.</p> <p>4. Public Notification Field office managers must provide public notice of proposed actions within wilderness areas. Notification should occur as soon as practicable, such as when the purpose and need for a proposal (which may be the same as the “purpose and need” for purposes of NEPA) is defined. Notification may occur through the agency website, local media, and the</p>

Comment No.	Commenter	Comment Category	Comment	Response
				<p>use of mailing lists of interested parties. In certain instances, such as projects with regional or national interest, Federal Register publication may also be warranted. Any substantive comments from the public (e.g. NEPA scoping comments), solicited or not, should be considered during the NEPA process. The notice should include enough information for the recipient to understand the purpose, location, nature, size, and expected implementation date of the proposed action.</p> <p>5. Wilderness Management Plans (note Mt. Trumbull and Mt. Logan Wilderness Management Plan 1990) Wilderness management plans, which are implementation-level plans that tier to allocation decisions in resource management plans, will be written as soon as is practicable after designation. Where a number of wilderness areas are in close proximity and have similar wilderness character and issues, they may be addressed in a single plan. Details on the form and content of wilderness management plans are found in BLM Manual 8561—Wilderness Management Plans.</p>
EA-12	Wilderness Watch	Designated and Proposed Wilderness	The EA is insufficient because there is no detail on the location, size, or expected implementation of motorized	The EA analyzed potential impacts to designated and proposed wilderness. See sections 3.4.4 and 4.2.4 for the

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			<p>use for range purposes in Wilderness.</p> <p>Absent a much more detailed analysis, this EA is programmatic in nature and site-specific EAs or EISs will be needed for each motorized use in the future.</p>	<p>detailed, site-specific analysis of the three alternatives. Details on the location and linear size of the range improvements in both designated and proposed wilderness are provided in Table G.7. Locations (maps) are also provided in Appendix A - Figures 8 and 9. All range improvements would be maintained on an as needed basis. As such, no schedule or level of use of mechanized equipment per maintenance event, other than the maximum equipment considered for each range improvement type can be provided. Maximum equipment for each range improvement type are described in the MRDG (Appendix D).</p> <p>Appendix D – Minimum Requirements Decision Guide (MRDG). Under NPS policy (2006), Section 6.3.4.3 Environmental Compliance “...proposals having the potential to impact wilderness resources will be evaluated in accordance with NPS procedures for implementing the National Environmental Policy Act. Section 6.3.5 Minimum Requirement states that “All management decisions affecting wilderness must be consistent with the minimum requirement concept. This concept is a documented process used to determine if administrative actions,</p>

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				<p>projects, or programs undertaken by the Service or its agents and affecting wilderness character, resources, or the visitor experience are necessary, and if so how to minimize impacts.”</p> <p>BLM Manual 6340 – Management of Designated Wilderness Areas (Public) (BLM 2012) provides BLM managers and staff with the general policies for administration and management of BLM Wilderness Areas designated by Congress.</p> <p>The MRDG (Appendix D) meets agency policy requirements to ensure the congressional mandate to manage each Wilderness Area "to preserve its wilderness character" will be met. After consideration of the environmental effects described in the EA and supporting documentation, the BLM determined that the actions are not a major Federal action and will not have a significant effect on the quality of the human environment, either individually or cumulatively with other actions in the area. No environmental effects meet the (40 CFR 1501.3(b)(2)) Council on Environmental Quality’s criteria for the degree of the effects. Our analysis of these criteria within this EA led the decision makers to conclude</p>

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				that the level of effects of the alternatives identified did not require an EIS.
EA-13	Wilderness Watch	Designated and Proposed Wilderness	The MRDG also does not take into account benefits for Wilderness of the removal of cattle. It merely looks at components for grazing infrastructure. This biases the analysis. Even then, Alternative C comes out the best.	Appendix D - MRDG Step 2: Alternative C – No Grazing. The MRDG in this section fully analyzes the impact to wilderness if no grazing alternative was selected and implemented.
EA-14	Western Watersheds Project	Designated and Proposed Wilderness	The Bureau uses a Minimum Requirements Decision Guide (MRDG) to authorize infrastructure necessary to facilitate future grazing authorizations, but at the same time uses the historic grazing as a rationale for violating the Wilderness Act in order to do so.	Under the Act (d) Special Provisions "(4) (Water resources and grazing) Within wilderness areas in the national forests designated by this Act, (1) the President may, within a specific area and in accordance with such regulations as he may deem desirable, authorize prospecting for water resources, the establishment and maintenance of reservoirs, water- conservation works, power projects, transmission lines, and other facilities needed in the public interest, including the road construction and maintenance essential to development and use thereof, upon his determination that such use or uses in the specific area will better serve the interests of the United States and the people thereof than will its denial; and (2) the grazing of livestock, where established prior to the effective date of this Act, shall be permitted to continue subject to such reasonable regulations as are deemed necessary by the Secretary of

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				Agriculture." MRDG is utilized by the Department of the Interior and its agencies to minimize impact to designated and proposed wilderness areas when maintenance of existing infrastructure or threat to life and property (e.g. wildfire) is necessary.
EA-15	Western Watersheds Project	Designated and Proposed Wilderness	<p>For the Step 1 Determination in the MRDG, the Bureau incorrectly states that the action is necessary because of Special Provisions or existing rights in wilderness, neither of which is true in this case. Grazing permits convey no rights and there is no special provision at issue here.</p> <p>While the Wilderness Act did not prohibit livestock grazing, it is not <i>required</i> to continue. In addition to the authority of the Bureau to end livestock grazing within wilderness areas, the Monument Proclamation states: "Ranch structures and corrals, fences, water tanks, and the ruins of sawmills are scattered across the monument and <i>tell the stories of the remote family ranches and the lifestyles of early homesteaders</i>. There are several old mining sites dating from the 1870s, showing the history of mining during the late 19th and early 20th centuries. The remote and undeveloped nature of the monument <i>protects these historical sites in nearly their original context</i>."</p>	<p>Grazing is a potential use permitted on public lands including some designated wilderness areas. It is addressed under Special Provisions as this permitted use is authorized in the GCPNM Proclamation (see below) as well as legislation, including the Wilderness Act of 1964. The Wilderness Act of 1964, Section 4(d)(4)(2) "The grazing of livestock, where established prior to the effective date of this Act, shall be permitted to continue subject to such reasonable regulations as are deemed necessary by the Secretary of Agriculture."</p> <p>43 Code of Federal Regulations PART 6300—MANAGEMENT OF DESIGNATED WILDERNESS AREAS §6304.25 What special provisions apply to livestock grazing? (a) If you hold a BLM grazing permit or grazing lease for land within a wilderness area, you may continue to graze your livestock provided that you or your predecessors began such use under a permit or lease</p>

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			Proclamation at page 2. It is clear that the (biased and incorrect) romantic notion of grazing is the <i>idea</i> to be protected, not the <i>activity</i> to be protected.	<p>before Congress established the wilderness area. (b) Your grazing activities within wilderness areas, including the construction, use, and maintenance of livestock management improvements, must comply with the livestock grazing regulations in part 4100 of this chapter.</p> <p>In addition, Grand Canyon-Parashant National Monument Proclamation 7265 (114 Stat 3236) states: “The Bureau of Land Management shall continue to issue and administer grazing leases within the portion of the monument within the Lake Mead National Recreation Area, consistent with the Lake Mead National Recreation Area authorizing legislation. Laws, regulations, and policies followed by the Bureau of Land Management in issuing and administering grazing leases on all lands under its jurisdiction shall continue to apply to the remaining portion of the monument.”</p>
EA-16	Western Watersheds Project	Designated and Proposed Wilderness	The MRGD (<i>sic</i>) indicates that the action is necessary to preserve the wilderness character: other values. EA at 113. However, the provision of the Resource Management Plan the Bureau cites to is about interpretive activities and historic ranching, not current ranching activities. The action of maintaining livestock grazing infrastructure for	MRDG page 113 states that No, this action is not necessary to preserve one or more of the five qualities of wilderness character i.e., untrammelled, undeveloped, natural, solitude or primitive & unconfined recreation. Under the other features of value, "sustainable, traditional ranching operations", which includes

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			<p>current use is not related to interpretive activities.</p> <p>Additionally, at page 115 of the EA, the Bureau notes that:</p> <p>The Mt. Trumbull-Mt. Logan Wilderness Management Plan (1990) addresses grazing infrastructure: Management does not consider new structures or planned ignition fires as methods to achieve program objectives. As any existing structures require major reconstruction or costly maintenance, strong consideration is given to relocating the development outside the wilderness.</p> <p>Instead of encouraging the use of backhoes, skid steers, and front-end loaders to clean and maintain degraded and perhaps long-unused stock tanks in wilderness areas, the Bureau should consider an alternative that would place livestock waters outside of wilderness and allow the existing wildlife water inside the wilderness area to naturally degrade. Similarly, instead of proposing to extend the amount of time livestock spend in wilderness from five months to twelve, the Bureau could eliminate livestock grazing within the wilderness portions of all pastures.</p>	<p>continuation of this western "historical lifestyle".</p> <p>Maintenance of an existing infrastructure may be less costly and cause less resource damage than construction of a new range improvement. However, re-location or abandonment of range improvement will be given consideration prior to maintenance. Most existing water developments within Big Spring Pipeline Allotment are fed via pipelines by springs that emanate in the Mt. Logan Wilderness Area. The troughs or reservoirs are located either outside the wilderness area or near the boundaries.</p> <p>Outside of Alternative C - No Grazing, elimination of grazing in wilderness or proposed wilderness is not further analyzed. This alternative was considered as proposed. See section 2.3.4 Alternatives considered but not carried forward for analysis. It was determined that the no grazing alternative was an adequate analysis for this proposal. No range improvements are proposed in this EA. A proposal to close the wilderness and proposed wilderness would require additional or separate analysis as it would require construction of additional range improvements including</p>

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				many miles of additional fences.
EA-17	Western Watersheds Project	Designated and Proposed Wilderness	<p>We disagree with the analysis in the MRDG on the following:</p> <p>Impacts to Wilderness Character: Untrammelled. We disagree because the longer-term presence of livestock (year-long use) will degrade wilderness character. The longer-term presence will increase the number of stock trails. Visible vegetation use will increase and be more widely distributed, increasing the amount of trammeling.</p> <p>Impacts to Wilderness Character: Natural. The replacement of t-posts, stays and barbed wire/slick wire, will reduce the natural character of the area. The year-long use of the pastures within wilderness will result in more vegetation removal in a wider area and the presence of livestock year-long will impact the natural quality of the wilderness area.</p> <p>Instead of installing new infrastructure or replacing degraded infrastructure within designated or proposed wilderness areas, the Bureau should either remove the infrastructure (with strict compliance with the Wilderness Act), or allow it to naturally degrade. This is especially true where the infrastructure is in disrepair,</p>	<p>2.3.1 Alternative A – Proposed Action would combine Belnap and Big Spring Pipeline Allotments, Extend the Season of Use for the Belnap Pastures, Implement a Nine-Pasture Rotation System, and Rename and Renew Permit for the New Combined Big Spring Pipeline Allotment. There is no designated wilderness or proposed wilderness in the Belnap Allotment. The proposal would allow better livestock rotation and would likely reduce use in the Big Spring Pipeline Allotment. This could potentially reduce livestock use in the Mt. Logan wilderness area. As stated in the EA, the permittee currently removes the majority of their livestock from both allotments to allow complete rest during the growing season.</p> <p>New infrastructure in designated or proposed wilderness is not proposed in any of the alternatives considered. Prior to maintenance, range improvements will be evaluated for abandonment or re-location where appropriate.</p> <p>Designation of the Monument did not, in and of itself, require modification of the current grazing practices. The presidential proclamation states that “Laws, regulations,</p>

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			has not been used in many years (in some places for decades), and where livestock grazing will increase impacts to areas that have thus far been functionally unavailable to livestock use. The Bureau cannot allow the use of motorized or mechanized vehicles to transport personnel or equipment into wilderness areas that have long been unused by livestock simply to facilitate an expanded grazing regime preferred by this permittee. The Bureau's duty is to protect natural resources and comply with the Monument Proclamation. Alternative C is the only alternative the complies with the Wilderness Act and should be the alternative chosen by the Bureau.	and policies followed by the BLM in issuing and administering grazing leases on all lands under its jurisdiction shall continue to apply..." (BLM 2008a; USGPO 2000) Under the Antiquities Act, the BLM must protect objects identified in the presidential proclamation that established the national monument. Therefore, if the BLM determines that any monument objects are harmed by current management then management (including permit terms and conditions) will be modified accordingly. The analysis of impacts to specific resources constitutes the analysis of impacts to monument objects in this EA.
EA-18	Wilderness Watch	Designated and Proposed Wilderness	The EA's Misunderstanding of Wilderness: One of the serious problems of the EA, particularly page 43, is the way Wilderness is illogically dissected into competing parts. One of the erroneous conclusions in the EA is that human structures, which are generally prohibited in Wilderness, are being defined as some kind of historic features important to maintaining Wilderness. As discussed below, the Wilderness Act does not enumerate specific qualities of Wilderness nor does it provide conflicting definitions for wilderness qualities. The	<p>The MRDG format, and its use in this EA, is dictated by the GCPNM RMP (MA-WM-01).</p> <p>Livestock grazing is addressed in the MRDG under Special Provisions as this permitted use is authorized in the GCPNM Proclamation (see below) as well as legislation, including the Wilderness Act of 1964. The Wilderness Act of 1964, Section 4(d)(4)(2) "The grazing of livestock, where established prior to the effective date of this Act, shall be permitted to continue subject to such reasonable regulations as are deemed necessary by the Secretary of</p>

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			<p>notion of five wilderness qualities came about in Landres' Keeping it Wild protocols—internal agency guidance documents that have not gone through formal notice and comment rulemaking. These documents are the subject of much disagreement and controversy, largely because they promote—intentionally or not—an interpretation of the Wilderness Act that is internally inconsistent and results in management actions that are antithetical to Wilderness preservation. See, e.g. Cole, et. al. 2015. While initially envisioned as a tool to help agencies measure wilderness character, on the ground it has had the unintended consequence of agencies (including the NPS and BLM) using the documents to creep back into active management paradigms that are predominant outside of Wilderness. (...) [I]t would be impractical and unwise to require that lands be completely untrammled prior to being designated, but [the drafters] fully expected wilderness areas, once designated, to be untrammled into the future. Id. at 106-107.</p> <p>Flaws in the Wilderness Analysis</p> <p>The EA analysis of impacts on</p>	<p>Agriculture.”</p> <p>43 Code of Federal Regulations PART 6300—MANAGEMENT OF DESIGNATED WILDERNESS AREAS §6304.25 What special provisions apply to livestock grazing? (a) If you hold a BLM grazing permit or grazing lease for land within a wilderness area, you may continue to graze your livestock provided that you or your predecessors began such use under a permit or lease before Congress established the wilderness area. (b) Your grazing activities within wilderness areas, including the construction, use, and maintenance of livestock management improvements, must comply with the livestock grazing regulations in part 4100 of this chapter.</p> <p>In addition, Grand Canyon-Parashant National Monument Proclamation 7265 (114 Stat 3236) states: “The Bureau of Land Management shall continue to issue and administer grazing leases within the portion of the monument within the Lake Mead National Recreation Area, consistent with the Lake Mead National Recreation Area authorizing legislation. Laws, regulations, and policies followed by the Bureau of Land Management in issuing and administering grazing</p>

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			<p>Wilderness seems very contradictory and confusing. The bullet points below are examples of this problem:</p> <ul style="list-style-type: none"> • The EA states on page 57 regarding Alternative A, "the untrammelled, undeveloped, natural and opportunities for solitude qualities of the wilderness areas within the Big Spring Pipeline allotment would be negatively affected." It then states, "Untrammelled, natural, and other features of value would see a positive effect on the quality. Trammeling from cattle grazing and the use of grazing infrastructure by cattle would continue, however, effects of trammeling, including cattle trails..." The reader can't determine the impacts to Wilderness from this. Further, calling cattle trails a trammeling impact conflates trammeling with trampling. The definitions are not the same. • The EA on page 57 regarding Alternative A also states, "Other features of value, in this case the direction in the RMP/GMP and GCPNM proclamation to administer grazing on GCPNM, would be positively affected by continued grazing and the maintenance of grazing infrastructure." Aside from the bizarre statement that the direction in the GMP and RMP 	<p>leases on all lands under its jurisdiction shall continue to apply to the remaining portion of the monument."</p> <p>An action, or activity, may have both positive and negative effects. As well, different activities within an alternative may have different effects. Cumulatively, it may appear that a wilderness value is positively or negatively affected while individual activities may cancel each other out.</p>

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			<p>are the features of value in Wilderness, grazing is a non-conforming use in Wilderness, though allowed, and negatively affects Wilderness.</p> <ul style="list-style-type: none"> • The EA on page 58 regarding Alternative C (no grazing for ten years) comes to an illogical conclusion. It states, "Trammeling and undeveloped qualities would continue to be negatively affected. Naturalness would be positively affected. Other features of value would be negatively affected." The EA does not explain what features of value in Wilderness would be harmed by no cattle grazing. Why would the Wilderness continue to be trammeled (controlled, constrained) by the removal of livestock? This turns the Wilderness Act on its head. These examples demonstrate a lack of familiarity with Wilderness and the Wilderness Act. They seem designed to support the preferred decision by rigging the analysis to suggest the proposed action would benefit Wilderness more than an alternative that removes a nonconforming use. 	
EA-19	Wilderness Watch	Designated and Proposed Wilderness	The cumulative impacts analysis only mentions the possibility of increased recreation use in and around Wilderness. We find it hard to believe there are no past agency decisions or foreseeable actions that have	Please see 4.3.4 Cumulative Impacts to Designated and Proposed Wilderness for further identification and analysis of historic impacts to designated or proposed wilderness areas.

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			affected or could affect Wilderness.	
EA-20	Wilderness Watch	Designated and Proposed Wilderness	The MRDG portion of the EA states on page 114 that grazing must continue in the Wilderness. That is a misreading of the Wilderness Act. Grazing is permitted to continue, but grazing is not more protected in Wilderness than outside it. If resource conditions warrant a cessation of grazing, it can be done in Wilderness, just as it can be done outside of Wilderness. The EA refers to the ongoing drought, a reason to not reissue the permits, be it inside or outside the Wilderness, at least until the drought abates.	Page 114 does not reference a "must" statement, in EA 114 states: Several pieces of legislation, including the Wilderness Act of 1964, direct that grazing activities "shall be permitted to continue within wilderness subject to reasonable regulations, policies, and practices" if they occurred prior to the designation of the wilderness. A summary of Land Health evaluations for both allotments is provided in EA section 3.2.3 Land Health Evaluation (LHEs). This section states the land health standards continue to be met in the Belnap Allotment; the Big Spring Pipeline Allotment continues to make substantial progress toward meeting land health standards.
EA-21	Wilderness Watch	Designated and Proposed Wilderness	(...) the MRDG on page 115 references the Mount Logan Wilderness Management Plan, regarding costly range infrastructure or those requiring extensive reconstruction, "strong consideration is given to relocating the development outside the wilderness." One problem is Figure 8 is too small a scale to determine what is in or outside of Wilderness, especially since there is the excluded cherrystem that seems to be in the same place as a pipeline.	In addition to the map provided in EA Appendix A - Figure 9 Existing Range Improvements within Wilderness or Proposed Wilderness Areas; Appendix G has various tables relative to range improvements. Table G.7. Existing Range Improvements within Designated or Proposed Wilderness Area. This table references existing water developments and fences within designated or proposed wilderness area. This table depicts linear objects (fence or pipeline) the miles of the

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				specific structure that may require maintenance.
EA-22	Wilderness Watch	Designated and Proposed Wilderness	The EA does not suggest or analyze an option of removing infrastructure from the Wilderness. The EA states on pages 42 and 43 that the Wilderness Plan anticipates "primarily non-mechanized maintenance of grazing infrastructure" rather than motorized. However, the emphasis in the MRDG seems to suggest extensive use of motorized equipment. This incongruity between the MRDG and EA must be rectified.	2.3.3 Alternative C – No Grazing states "Range improvements would not be maintained by the permittee for this ten-year term." Water developments are utilized by wildlife and may be maintained for that purpose even if livestock were removed. The BLM is consistent in advocating that the minimum required tool be used for maintenance of range improvements in wilderness or proposed wilderness areas. Prior to maintenance, consideration of abandonment or re-location would be given to range improvements.
EA-23	Wilderness Watch	Designated and Proposed Wilderness	The MRDG's analysis has major flaws as discussed in the above section – dissecting Wilderness into component parts and playing them off each other, the Wilderness Act is effectively repealed by administrative action. What is most absurd is that the MRDG states the no grazing alternative still has a negative impact on Wilderness because of features of value. For some strange reason, the MRDG suggests backhoes, skid steers, front end loaders, and plastic liners are somehow part of the long rich human history of the area. If livestock grazing is an important part of the Monument outside of Wilderness – the proclamation does not amend the Wilderness	Features of value gives consideration to centuries-old and rich cultural traditions in wilderness management. The GCPNM Proclamation states "The GCPNM is responsible for grazing management of both allotments (BLM 2008a). Designation of the Monument did not, in and of itself, require modification of the current grazing practices. The presidential proclamation states that "Laws, regulations, and policies followed by the BLM in issuing and administering grazing leases on all lands under its jurisdiction shall continue to apply..." (BLM 2008a; USGPO 2000).

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			Act to suggest grazing is a positive wilderness attribute – any historic value of grazing would conjure in the mind the West of the 1800s when these machines and plastic were not available.	See Section 4.3.1 for a historic perspective of grazing in the area.
EA-24	Wilderness Watch	Designated and Proposed Wilderness	The MRDG also suggests the proposed action is slightly better than continuation of the existing grazing program. However, the AUMs remain the same and the season of use is expanded. Therefore, the two grazing alternatives should be identical. Any benefits of rotation would be offset by a longer season of use.	2.3.1 Alternative A – Proposed Action would combine Belnap and Big Spring Pipeline Allotments, Extend the Season of Use for the Belnap Pastures, Implement a Nine-Pasture Rotation System, and Rename and Renew Permit for the New Combined Big Spring Pipeline Allotment. There is no designated wilderness or proposed wilderness in the Belnap Allotment. The proposal would allow better livestock rotation and would likely reduce use in the Big Spring Pipeline Allotment. This could potentially reduce livestock use in the Mt. Logan wilderness area. As stated in the EA, the permittee currently removes the majority of their livestock from both allotments to allow complete rest during the growing season.
EA-25	Name or Organization Not Provided Utah resident	Climate Change - Drought	BLM and NPS should err on the side of caution especially with the uncertainty of climate change. How would it [proposed continuation of livestock grazing] contribute to solutions to the escalating climate and extinction crises? How would it help rangeland cope with environmental changes? The	During drought years, the number of cattle grazed on the allotment are reduced to prevent them from adversely affecting vegetation. It is important to note that the BLM has existing measures in place to reduce grazing during drought (EA 2.2.2 Monitoring and Adaptive Management). Monitoring is conducted regularly on both allotments

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			answer to all is: it won't. In fact, this grazing may do the opposite. The No Grazing Alternative is the sensible choice.	which would indicate whether vegetation conditions are being affected by grazing or other factors. This monitoring is conducted regardless of climatic conditions.
EA-26	Name or Organization Not Provided BLM is Biased	Climate Change - Drought	Climate change is already adding to the adverse impacts from grazing (<i>commentor favors No Grazing Alternative</i>).	<p>Climate change is a global phenomenon that is thought to result from a multitude of factors, including global GHG emissions. GHGs include water vapor, carbon dioxide, nitrous oxide, methane, and carbon monoxide. Projected climate change impacts include air temperature increases and decreases, sea level rise, changes in the timing, location, and quantity of precipitation, and increased frequency of extreme weather events such as heat waves, droughts, and floods. These changes would vary regionally and affect renewable resources, aquatic and terrestrial ecosystems, and agriculture. The proposed alternatives would be a minute source of carbon dioxide (CO2) and other GHGs, which would have a negligible effect on local, regional, and global climate change.</p> <p>The proposed action includes a grazing system (EA 2.3.1.1) which has a deferred pasture rotation, summer/fall rest, allowable utilization of up to 50 % of the current year's growth. When 50% forage utilization is reached, livestock would be moved to another pasture or off the allotment</p>

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				completely. These management practices, combined with adaptive management options that allows the BLM to adjust the timing, intensity, frequency, and duration of grazing; the grazing management system; and livestock numbers temporarily or on a more long-term basis, as deemed necessary. These actions, pasture rotation, utilization limit, and rest from grazing during the growing season are key to reducing impacts to vegetation, soils, and wildlife.
EA-27	Western Watersheds Project	Cost Benefit	Please disclose the fiscal realities of livestock grazing on these allotments. How much revenue is generated by the authorized and actual use? How much in federal subsidies has been provided to any and all permittees for these two allotments in the past 20 years? How much does it cost the Bureau to manage livestock grazing on these allotments? Please also provide a cost-benefit analysis.	Table 3.1 Elements/Resources of the Human Environment – Socio-economic Values summarizes the economic impacts of the three alternatives. The fees charged for grazing livestock on Public Lands was authorized by the Public Rangelands Improvement Act of 1978 (PRIA). The grazing fee formula authorized through PRIA was enacted by congress and changes would require a congressional act. Infrastructure labor is performed primarily by the grazing permittee but can include others including youth groups (American Conservation Experience (ACE). Material costs are shared by a wide variety of sources including the permittee, federal agencies including BLM and Natural Resource Conservation Service

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				(NRCS), state agencies including Arizona Game and Fish Dept. (AGFD), non-profit organizations including Arizona Association of Conservation Districts (AACD), Pheasants and Quail Forever, hunting groups, and others.
EA-28	<p>Name or Organization Not Provided;</p> <p>Name or Organization Not Provided GCPNM Visitor</p> <p>Utah resident</p> <p>Western Watershed Project</p> <p>Name or Organization Not Provided; A stakeholder</p>	Monument Objects	<p>Continued livestock grazing threatens GCPNM objects and values. The protection of these objects and values is the dominant legal reservation. I think the No Grazing Alternative is necessary to ensure this required protection.</p> <p>Commercial livestock grazing is not compatible with the protection of GCPNM objects. So continued grazing should not be allowed. BLM has the authority to phase out grazing because it threatens monument objects. BLM should stop treating its monument lands the same as public domain lands. Monuments should be managed for object protection rather than multiple uses.</p> <p>How would this proposed continuation of livestock grazing help protect GCPNM objects?</p> <p>Please describe all Monument objects that are impacted, and will be impacted, by livestock grazing authorizations on these allotments.</p>	<p>See Section 1.5 Relationships to Statutes, Regulations, or Other Plans “The GCPNM is responsible for grazing management of both allotments (BLM 2008a). Designation of the Monument did not, in and of itself, require modification of the current grazing practices. The presidential proclamation states that “Laws, regulations, and policies followed by the BLM in issuing and administering grazing leases on all lands under its jurisdiction shall continue to apply...” (BLM 2008a; USGPO 2000) Under the Antiquities Act, the BLM must protect objects identified in the presidential proclamation that established the national monument. Therefore, if the BLM determines that any monument objects are harmed by current management then management (including permit terms and conditions) will be modified accordingly. The analysis of impacts to specific resources constitutes the analysis of impacts to monument objects in this EA”.</p>

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	Name or Organization Not Provided		Alternative C would assure that the required protection of GCPNM objects is achieved. BLM has a traditional preference for livestock grazing regardless of potential resource impacts or conflicts. So BLM cannot be trusted to objectively manage grazing especially in a national monument.	Manuals that give the BLM staff further guidance for management of National Monuments and National Landscape Conservation Systems are: BLM Manual 6220- National Monuments, National Conservation Areas, and Similar Designations relative to livestock grazing states: I. Livestock Grazing.
	Name or Organization Not Provided; BLM is Biased		NPS and BLM have not done enough to proactively protect GCPNM monument objects. Many of these objects are already suffering from climate change, drought, cheatgrass, and other environmental changes. Cattle grazing adds to these changes by removing vegetation, trampling soils, and spreading cheatgrass. The EA contains comprehensive information that is helpful. But BLM is known to favor ranchers and grazing. This affects BLM's credibility on whether the EA analysis is actually complete and honest. A national monument by law requires that object protection supersedes normal grazing management. This higher level of protection should be respected. I therefore recommend approval of the EA No Grazing Alternative. Let this public land rest from grazing pressure for a decade. Then see what has been restored or improved as a result. That would represent cautious management on	1. Where consistent with the designating legislation or proclamation, livestock grazing may occur within Monuments and NCAs. 2. Grazing management practices will be implemented in a manner that protects Monument and NCA objects and values unless otherwise provided for in law. 3. The BLM will use Monuments and NCAs as a laboratory for innovative grazing techniques designed to better conserve, protect, and restore NLCS values, where consistent with the designating legislation or proclamation.
	Western Watershed Project			BLM Manual 6100-National Landscape Conservation System (NLCS) also in regards to livestock grazing states: K. Livestock Grazing 1. To the extent consistent with the designating legislation or proclamation and other applicable law, livestock grazing may occur within NLCS units.

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			<p>behalf of object protection. Thank you.</p> <p>This EA is not sufficient because it is dismissive of monument objects and improperly lumps them in with general resources. The public cannot distinguish whether objects are being treated any differently than other resources. This shows that BLM is biased for ranchers and wants to treat this national monument like regular FLPMA public domain lands. But the Antiquities Act and monument proclamation are actually dominant over FLPMA management in the GCPNM.</p> <p>The Monument Proclamation is the Dominant Land Management Directive. As we stated in our previous comments, the Bureau should have used this NEPA process as an opportunity to determine whether or not to authorize grazing within these allotments and whether changes to current management are necessary. On the Grand Canyon-Parashant National Monument grazing is a discretionary use, and grazing is not a Monument object to be protected in the Monument Proclamation. Therefore, the Bureau must follow the National Landscape Conservation System (NLCS) manuals, science strategy, and use the Monument</p>	<p>2. Grazing management practices will be implemented in a manner that protects the values for which NLCS units were designated unless otherwise provided for in law.</p> <p>3. The BLM will use NLCS units as a laboratory for innovative grazing techniques designed to better conserve, protect, and restore NLCS values, to the extent consistent with the designating legislation or proclamation and other applicable law.</p> <p>National Park Service is not required to comply with NLCS regulations as NLCS is specific to Bureau of Land Management (see above).</p>

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			Proclamation. National Park Service regulations require the non-impairment of objects and values on lands managed by the Park Service. While the Proclamation states that “[l]aws, regulations, and policies followed by the Bureau of Land Management in issuing and administering grazing leases on all lands under its jurisdiction shall continue to apply to the remaining portion of the monument[,]” the Bureau and Park Service must also comply with the NLCS regulations to ensure Monument objects are protected if the Bureau authorizes livestock grazing. Where grazing is not compatible with such protections, it should be eliminated.	
EA-29	Western Watersheds Project American Concerned About Harmful Grazing	Rangeland Health	<p>The Allotments Exhibit Degraded Conditions. On our recent visit to the allotment we observed degraded conditions which indicate livestock grazing should be significantly reduced, not expanded to year-long. Below you will see photos depicting weed infestations and degraded conditions. Each photo includes location information at the bottom.</p> <p>Hammered riparian habitats. Highly eroded streambanks devoid of vegetation. Trampled soils. Spreading cheatgrass from cumulative ground disturbance and killing</p>	The photos included are not representative of the entirety of the two subject allotments. Based on the location information included with each photo, most were taken near (within 0.5 mile) of a range development including water trough, water pond, reservoir, or a corral. The photo of the corral in the Cole Pasture was taken on AZ state land looking toward the private corral on private land, another taken in the Whitmore Pasture is within 0.5 mile of a private ranch. The BLM does not control state land or private inholdings. As these locations with livestock developments

Comment No.	Commenter	Comment Category	Comment	Response
	Western Watersheds Project		<p>protective biological soil crusts. Excessive consumption of forage by cattle, robbing wildlife of their needed food. Cattle defecating and urinating in streams. The ongoing damage is obvious and outrageous. These are public lands and resources that are supposed to belong to all Americans. But they are often managed like private ranches.</p> <p>Additional Concerns The Land Health Evaluation was not provided to the public.</p> <p>The Big Spring Pipeline allotment has not met LHE standards for many years and while the Bureau identifies this allotment as making significant progress towards meeting standards, we must ask: how long does it take for an allotment “making significant progress towards meeting standards” to actually meet those standards? At what point will the Bureau admit that the allotment is simply failing to meet standards and livestock grazing should be ended? It is not appropriate to continue livestock grazing on the Big Springs Pipeline allotment.</p> <p>The Bureau indicates the Belnap allotment is meeting standards, but it is in the “improve” management status, which indicates range condition is unsatisfactory, there are serious resource-use</p>	<p>receive much heavier livestock use than the majority of the subject allotments, we would expect higher livestock use at these locations. The Arizona Strip District, including GCPNM has an aggressive weed management program and attempt to control invasive and noxious weeds throughout the Monument.</p> <p>A summary of Land Health evaluations for both allotments is provided in EA section 3.2.3 Land Health Evaluation (LHEs). This includes summary of the current methodology for LHE and determining if allotments are meeting Arizona Standards and Guides is described in Appendix B. The BLM conducted evaluations for rangeland conditions on the Belnap Allotment (AZ04849) September 30, 2002. An evaluation was conducted on the Big Spring Pipeline Allotment (AZ04870) on May 22, 2006. The IAT determined that the Belnap Allotment met applicable LHE standards. The IAT determined that the Big Spring Pipeline Allotment is making significant progress toward meeting LHE standards. The Arizona Strip District, including the GCPNM have typically not included the raw LHE data forms and Standard and Guide evaluations, with the reasoning that summaries were adequate.</p>

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			<p>conflicts, production is at low to moderate levels, and current management is unsatisfactory. Yet, the Bureau intends to increase the amount of livestock use on this allotment.</p>	<p>Western Watershed requested this data and the BLM replied with digital copies of the LHEs for both allotments. Public comment was extended for an additional nine days.</p> <p>Further identified in section 3.2.3 Land Health Evaluation: In 2022, an interdisciplinary team comprised of both BLM and NPS resource specialists conducted LHE in both allotments utilizing Interpreting Indicators of Rangeland Health, Version 4 (BLM 2005). The team conducted the evaluation on the Belnap Allotment May 18, 2022, and on the Big Spring Pipeline Allotment on June 9, 2022. In conjunction with the field visits, the team considered existing monitoring data, specifically frequency trend monitoring plots that were established on both NPS and BLM managed lands in both allotments. These plots were established in the 1980s and are read on a five-year cycle. The data associated with these evaluations and trend monitoring are available in Appendix C (utilization and monitoring data) and Appendix F (Desired Plant Community/Ecological Site Description Comparison Tables). The LHE sites are compared to the ESDs, which represent the historic composition of these sites based on soils, elevation, and</p>

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				<p>aspect. In some instances, the historic composition is not the management goal. This may be due to management for wildlife species or livestock group, or a particular seral state. In this instance, a comparison between DPC and current composition is preferred. Based on the recent LHE and long-term monitoring data, the team determined that the Belnap Allotment continues to meet LHE standards and Big Spring Pipeline Allotment continues to make significant progress toward meeting LHE standards. The Proposed Action would allow additional rest by permitting greater rotation in the Belnap Allotment and relieving use in the lower Big Spring pastures (see 2.3.1 Alternative A - Proposed Action).</p>
EA-30	Western Watersheds Project	Rangeland Health	<p>While we appreciate the efforts of the Bureau staff to collect and share the information about natural resources within this project area, we are dismayed that the only path forward the Bureau has identified is to expand livestock grazing use in an area that should be protected to a very high level as part of the National Landscape Conservation System and in an area that clearly has degraded conditions with excessive amounts of weeds which are significantly detrimental to rare native plants, wildlife, and</p>	<p>The GCPNM has an aggressive weed management program and aims to control invasive and noxious weeds throughout the Monument.</p>

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			the Monument objects which should be a high priority for protection.	
EA-31	Western Watersheds Project	Incorporation of Previous Comments	We incorporate our previous comments fully into these comments and offer the following additional comments in response to our review of the EA, as well as our recent visit to the Big Springs allotment.	Please see additional WWP comments from subject allotment S&Gs, public scoping for this EA, as well as the comments submitted during scoping and the public comment period for this EA.
EA-32	Western Watersheds Project	Monitoring	Our review of the Key Area information, ESD, and DPC objectives confirm our impression that conditions are degraded. Palatable and desirable plants are not present in sufficient or desired frequencies while unpalatable species are present in excessive amounts. The Bureau has inadequately monitored for biocrusts, but the information included in the EA indicates that biocrusts are present in extremely low numbers or not recorded, which indicates they are entirely absent from certain Key Areas.	Biological Soil Crust monitoring occurs during frequency trend plot readings. Presence or absence of cryptogams is recorded. Not all sites are conducive to cryptogam presence, sites with abundant vascular plant presence may either not have much cryptogam or biocrust cover, or it may be concealed.
EA-33	Western Watersheds Project	Monitoring	<p>Our concerns about the validity of the trend data remain and have not been addressed. There are a few sites we believe are trending down that are reported as static. Some key areas have high numbers of unpalatable species which indicates they could be overgrazed.</p> <p>In our prior comments we pointed the Bureau and Park Service to the following report:</p>	<p>Section 2.3.1 Alternative A - Proposed Action address winter use in the lower Whitmore pastures. The proposed action would allow more fall through spring use in the Belnap Allotment to alleviate some use in the Big Spring Pipeline winter pastures.</p> <p>See EA Appendix C for current and historic trend monitoring data. See 3.4.1</p>

Comment No.	Commenter	Comment Category	Comment	Response
			<p>Duniway, M.C., and Palmquist, E.C., 2020, Assessment of rangeland ecosystem conditions in Grand Canyon-Parashant National Monument, Arizona: U.S. Geological Survey Open File Report 2020–1040, 42 p., https://doi.org/10.3133/ofr20201040.</p> <p>Duniway and Palmquist (2020) studied ecological site groups and grazing management on the south end of the GSP in NPS land. The south end of the Big Spring Pipeline allotment was included in the study. They note more bare ground and less ground cover in areas with high cattle use, suggesting reduced hydrologic function and soil and site stability as cattle use is increased. However, they did not find evidence of cattle impacts on perennial grasses. The lack of impacts on perennial grasses is attributed to the low incidence of perennial grasses in the study area except for deep limestone ecological site groups in the middle desert, a type that occurs frequently in the Big Spring Pipeline allotment.</p> <p>“It is noteworthy that we did not find evidence of cattle impacts on perennial grasses. We attribute this to (1) generally low cover of perennial grasses in the study</p>	<p>Livestock Grazing – Ecological Site Inventory section. Comparison of trend data to the ESDs for the Big Spring Pipeline Pasture shows that all key areas are in mid to late seral states. Most key area sites are meeting the Desired Plant Community (DPC) objectives. For the Belnap Pasture, the two sites are mid seral and PNC, also meeting DPC objectives.</p> <p>The actual quote concerning livestock distribution from this USGS report states “Creating smaller pastures can help with achieving a more even distribution (Hart and others, 1993), though this may not be feasible given the remote and rugged nature of Grand Canyon-Parashant National Monument and the requirement of frequent movement of herds between pastures.”</p> <p>The next statement the commentor quotes concerns livestock management and is a general summary statement for the entire Desert Southwest “Warming and drying predicted for the Desert Southwest will likely further decrease vegetative cover and exacerbate risk to rangeland ecosystems (Seager and others, 2007; Munson and others, 2011; Hoover and others, 2015). Furthermore, increased aridity and severity of drought</p>

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			<p>area (except for the deep limestone ESG in the middle desert; fig. 15), (2) winter use in many of the allotments where grazing is most prevalent (table 2); and (3) stocking rates well below what is permitted (in most instances; table 2)". See page 36.</p> <p>The report states that better livestock distribution on the Monument is important in order to protect range conditions, but livestock distribution is "may not be feasible given the remote and rugged nature of Grand Staircase-Parashant National Monument (sic) and the requirement of frequent movement of herds between pastures." Id. at page 36. Additionally, drought and climate impacts are a concern: "[w]arming and drying predicted for the Desert Southwest will likely further decrease vegetative cover and exacerbate risk to rangeland ecosystems... Increased aridity and severity of drought will heighten risks of improper livestock management, particularly risk to wind erosion." Id. Given the risks of significant negative impacts to the lands managed by the Bureau and the Park Service from poorly managed livestock grazing, along with the massive amount of infrastructure necessary to implement better management,</p>	<p>will heighten risks of improper livestock management, particularly risk to wind erosion (Duniway and others, 2019)."</p> <p>The final paragraph of the paper sums up the idea of better distribution – something the proposed action would accomplish.</p> <p>"The results presented here suggest some improvements to livestock distribution are needed in the Grand Canyon-Parashant National Monument." And "these results support rangeland monitoring and assessment programs that collect indicators of soil and site stability (bare ground and ground cover) and do not rely solely on vegetation composition indicators to assess livestock management" which we are doing with AIM and sagebrush plots.</p>

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			the agencies must at this time adopt the no-grazing alternative.	
EA-34	Western Watersheds Project	Monitoring	<p>From the ESD: “The historical climax plant community (HCPC) represents the natural potential plant communities found on relict or relatively undisturbed sites. Other plant communities described here represent plant communities that are known to occur when the site is disturbed by factors such as grazing, fire, or drought.” For this area, the HCPC is a perennial grassland. “The reference state plant community is composed primarily of warm season mid-grasses and short grasses with a mix of cool season grasses and half-shrubs. Dominant grasses include black grama, blue grama, squirreltail, Indian ricegrass, galleta and sideoats grama. Dominant shrubs include winterfat and fourwing saltbush. Natural climatic variation result in changes in the amount of and ratio of both individual plants and warm season versus cool season plants, particularly grasses.” “Continuous heavy herbivory, unmanaged grazing and summer droughts can result in a decline of the herbaceous dominance.” “Continuous heavy herbivory and/or unmanaged grazing and lack of natural fire promotes the increase of woody species.” “In this state the plant communities are characterized</p>	<p>See 3.4.1 Livestock Grazing - Trend: "The monitoring data reveals that under both the current and historic season of use, the key grass species have responded similarly. What is evident is half of the cool season and warm season key specie grasses have increased while the other half have remained static within the Belnap Allotment" since trend establishment in 1982. In the Big Spring Pipeline Allotment, Table 3.2 illustrates five of the seven key areas have a static or upward trend since mid-1980s or early 1990s. The other two key areas, Whitmore Pasture #4 and Upper Cole Pasture #6 have a downward trend based on recent monitoring. Although there is a downward trend, both sites remain in a late seral state. Site #4 continues to meet the ESD site guide for HCPC for both warm and cool season grass; Site #6 is further addressed in the next paragraph.</p> <p>The western U.S., including northwest Arizona has been experiencing drought with periods of extreme drought for the past two decades. On dry, sandy sites, or during periods of prolonged drought, seedlings and established stands of warm-season grasses have the advantage over cool season grasses of being very</p>

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			<p>by a dominance of juniper and other woody species. Juniper has increased due to lack of fire/exclusion along with unmanaged grazing and available seed source for juniper. The overstory canopy of juniper is typically over 10 percent and can range up to 25 percent. The understory is dominated by either grasses and/or shrubs with increased forbs... A lack of fire, lack of grazing management and above normal winter precipitation result in an increase of juniper and cool season annual forbs. Non-native annuals may be present in minor amounts.” “With continuous grazing use during winter and spring, the relatively scarce cool season mid grasses are replaced by rabbitbrush, snakeweed and lower value forbs and grasses.” The Key Area monitoring data provided by the Bureau in the EA indicates that livestock grazing is decreasing the presence of cool season grasses, increasing rabbitbrush and other lower value forbs and grasses, and contributing to degraded conditions. Expanding the presence of livestock in the allotments, both temporally and spatially, is the opposite management the Bureau should be embracing.</p>	<p>drought-tolerant (NRCS 2004). As correctly stated in the reference to the ESD comment for these areas "Natural climatic variation result in changes in the amount of and ratio of both individual plants and warm season versus cool season plants, particularly grasses." When examined for perennial grass composition including both warm and cool season grasses, this objective is met for both desired plant community (DPC) and ESD HCPC for all sites within the two allotments except #6. On site #6, Utah juniper and Wyoming sagebrush exceeds both site guide composition and DPC objectives. Dense overstory of woody plants at this site has reduced the understory biomass and composition, including warm and cool season perennial grasses.</p>
EA-35	Western Watershed Project	No Grazing	The Monument Proclamation is the Dominant Land Management Directive	See Section 1.5 Relationships to Statutes, Regulations, or Other Plans “The GCPNM is

Comment No.	Commenter	Comment Category	Comment	Response
			<p>As we stated in our previous comments, the Bureau should have used this NEPA process as an opportunity to determine whether or not to authorize grazing within these allotments and whether changes to current management are necessary. On the Grand Canyon-Parashant National Monument grazing is a discretionary use, and grazing is not a Monument object to be protected in the Monument Proclamation. Therefore, the Bureau must follow the National Landscape Conservation System (NLCS) manuals, science strategy, and use the Monument Proclamation. National Park Service regulations require the non-impairment of objects and values on lands managed by the Park Service. While the Proclamation states that “[l]aws, regulations, and policies followed by the Bureau of Land Management in issuing and administering grazing leases on all lands under its jurisdiction shall continue to apply to the remaining portion of the monument[,]” the Bureau and Park Service must also comply with the NLCS regulations to ensure Monument objects are protected if the Bureau authorizes livestock grazing. Where grazing is not compatible with such protections, it should be eliminated.</p>	<p>responsible for grazing management of both allotments (BLM 2008a). Designation of the Monument did not, in and of itself, require modification of the current grazing practices. The presidential proclamation states that “Laws, regulations, and policies followed by the BLM in issuing and administering grazing leases on all lands under its jurisdiction shall continue to apply...” (BLM 2008a; USGPO 2000) Under the Antiquities Act, the BLM must protect objects identified in the presidential proclamation that established the national monument. Therefore, if the BLM determines that any monument objects are harmed by current management then management (including permit terms and conditions) will be modified accordingly. The analysis of impacts to specific resources constitutes the analysis of impacts to monument objects in this EA”.</p> <p>Manuals that give the BLM staff further guidance for management of National Monuments and National Landscape Conservation Systems are: BLM Manual 6220- National Monuments, National Conservation Areas, and Similar Designations relative to livestock grazing states: I. Livestock Grazing.</p>

Comment No.	Commenter	Comment Category	Comment	Response
	Name or Organization Not Provided; American Concerned About Harmful Grazing		After reviewing the EA, I support and urge BLM to approve Alternative C - No Grazing. This would best allow affected resources to cope with rapidly changing environmental conditions from climate change, drought, extreme heat events, cheatgrass, and more severe and widespread wildfires. Many of these affected resources are also GCPNM objects that BLM must protect. Status quo grazing management in the GCPNM is no longer appropriate. It's time for positive changes.	1. Where consistent with the designating legislation or proclamation, livestock grazing may occur within Monuments and NCAs. 2. Grazing management practices will be implemented in a manner that protects Monument and NCA objects and values unless otherwise provided for in law. 3. The BLM will use Monuments and NCAs as a laboratory for innovative grazing techniques designed to better conserve, protect, and restore NLCS values, where consistent with the designating legislation or proclamation.
	Name or Organization Not Provided		The No Grazing Alternative should be carried out. Cattle grazing does not benefit GCPNM objects and may damage them. NPS should not pander to ranchers like BLM usually does.	BLM Manual 6100-National Landscape Conservation System (NLCS) also in regards to livestock grazing states: K. Livestock Grazing 1. To the extent consistent with the designating legislation or proclamation and other applicable law, livestock grazing may occur within NLCS units.
	Name or Organization Not Provided		I hope NPS managers will have enough courage to stand up to BLM's pro grazing managers. Alternative C, no grazing, would ensure the required protection of GCPNM objects. The other alternatives may jeopardize those objects. BLM managers cannot properly manage livestock grazing especially in a national monument. They always make excuses for ranchers and say that resource degradation is caused by other factors. NPS	2. Grazing management practices will be implemented in a manner that protects the values for which NLCS units were designated unless otherwise provided for in law. 3. The BLM will use NLCS units as a laboratory for innovative grazing techniques designed to better conserve, protect, and restore NLCS values, to the extent consistent with the designating legislation

Comment No.	Commenter	Comment Category	Comment	Response
	Name or Organization Not Provided; GCPNM Supporter		managers should not fall for this BS. I support the No Grazing Alternative. This livestock grazing is not compatible with the required protection of GCPNM objects and values. Grazing causes impacts on resources that are already increasingly stressed by climate change and drought. These public lands should be allowed to rest. I think BLM and NPS should stop their pro grazing bias and start doing more to restore land health. I appreciate this comment opportunity.	or proclamation and other applicable law. National Park Service is not required to comply with NLCS regulations as NLCS is specific to Bureau of Land Management. (see above).
	Name or Organization not provided Opponent of grazing on GCPNM		BLM should adopt the no grazing alternative and deny renewal of these grazing permits. Grazing is destructive and a rip off of taxpayers. It does not belong in a national monument. See the attachment for some reasons. Thanks. Attachment: Million Cattle Graze on Federal Land for Almost Nothing.pdf	
	Name or Organization not provided BLM is Biased		Despite BLM's obvious bias, EA Alternative C is best to ensure GCPNM object protection. Regardless of the EA's data and conclusions, cattle grazing can and does threaten monument objects. Climate change is already adding to the adverse impacts from grazing.	

Comment No.	Commenter	Comment Category	Comment	Response
			I wish BLM would respect that this is a national monument where object protection must always come first.	
EA-36	Western Watersheds Project	Grazing Permit	<p>Please provide information and documentation that the permittees for these allotments have the required base water for this permit.</p> <p>Please provide all information related to compliance with grazing permit terms and conditions on these allotments for the past 10 years.</p>	<p>There are various requirements that must be documented to be granted a BLM livestock grazing permit. These requirements are analyzed prior to permit transfers, as well as during the permit renewal process. The permittee for these two allotments has met those requirements. Water rights are administered by the Arizona Department of Water Rights.</p> <p>Compliance and monitoring is addressed in 3.4.1 Livestock Grazing and Appendix C Actual Use and Utilization sections.</p>
EA-37	Western Watersheds Project	Proposed Action	Given that actual use has been below the permitted AUMs every year since the 1980s, it is unclear why the permittee or either federal agency believes that increasing use is a wise course of action at this point in time, especially in light of drought and climate impacts and the need to protect wildlife habitat and corridors.	See 2.3.1 Alternative A – Proposed Action. “Combine Belnap and Big Spring Pipeline Allotments, Extend the Season of Use for the Belnap Pastures, Implement a Nine-Pasture Rotation System, and Rename and Renew Permit for the New Combined Big Spring Pipeline Allotment”. This alternative would not analyze or authorize additional AUMs, it would allow use of the existing Belnap North and South pastures for year-round use rather than current late fall through early spring use. The seven existing Big Spring Pipeline pastures in addition to

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				the existing two Belnap pastures would be the nine pastures of use.
EA-38	Barry Bundy	Proposed Action	I think that Alternative A is the best action. By combining the Belnap and Big Spring Pipeline Allotments and extending the season of use for the Belnap pastures and implementing a nine pasture rotation system is a win win for the producer as well as the agency. Renaming the permit (Big Spring Pipeline Allotment) makes complete sense to me.	The EA includes three alternatives that are fully analyzed, including 2.3.3 Alternative C - No Grazing alternative. The three alternatives are fully analyzed in Chapters 3 and 4 of the EA.
EA-39	Western Watersheds Project	Range Improvements	How many wells has the Bureau approved construction for on this allotment in the last 10 years? Please provide maps identifying all of the range infrastructure on this allotment. Ideally this could be an interactive map that also identifies the date of construction for wells, tanks, pipelines, etc.	No wells have been authorized for either allotment in the past decade or more. Map of existing range improvements for both allotments is found in Appendix A, Figure 8. See 2.3.1 Alternative A- Proposed Action. Existing Range Improvements are also in tabular form by range improvement type for each allotment in Appendix G. No new range improvements or roads are proposed or associated with this proposal. There is a proposal to move the BLM 1045 road that currently goes through a private ranch which BLM is unable to obtain a right-of-way for this private section. That proposal is analyzed under a separate EA and would re-route the road from private land to BLM Public Land to allow continued public access to Whitmore Overlook and the Colorado River.

Appendix C: Non-Impairment Determination

Belnap and Big Spring Pipeline Allotments Grazing Permit Renewal Grand Canyon-Parashant National Monument, National Park Service

DETERMINATION OF NON-IMPAIRMENT

By enacting the NPS Organic Act of 1916 (Organic Act), Congress directed the US Department of the Interior and the National Park Service to manage units “to conserve the scenery, natural and historic objects, and wild life in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wild life in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (54 USC 100101). NPS Management Policies 2006 Section 1.4, explains the prohibition on impairment of park resources and values:

“While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the National Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.”

An action constitutes impairment when its impacts “harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values” (NPS 2006, Section 1.4.5). To determine impairment, the National Park Service must evaluate the “particular resources and values that will be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts.” An impact on any park resource or value may constitute impairment, but an impact would be more likely to constitute an impairment to the extent that it affects a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified in the GCPNM general management plan or other relevant NPS planning documents as being of significance (NPS 2006, Section 1.4.5).

The significance and importance of each resource, based on the foundation document and general management plan for GCPNM, is discussed under the analyzed resource sections below.

The resource impact topics carried forward and analyzed for the NPS selected action in the environmental assessment and for which an impairment determination is contained in this

attachment are soils, vegetation including special status and invasive, non-native plant species, wildlife (including big game, sensitive species, and migratory birds). A non-impairment determination is not made for wilderness or permit holder traditional uses and socioeconomics because these are not considered to be a park resource or value subject to the non-impairment standard established by the Organic Act and clarified further in Section 1.4.6 of NPS Management Policies 2006. Each resource or value for which non-impairment is assessed and the reasons why impairment will not occur is described below. This non-impairment determination has been prepared for the selected action, as described in the Finding of No Significant Impact for the Belnap and Big Spring Pipeline Grazing Permit Renewal EA.

Soil Resources

Soils are included in the spectrum of geologic processes necessary for the GCPNM to fulfill its purpose. Soils are fundamental to the creation and survival of ecosystems in the Monument, including in the grazing allotments and along trailing routes. Soils in or near a reference condition promote ecosystem health through biological soil crusts, delivery of nutrients, absorption and infiltration of water, and other benefits. Soils in good condition support robust ecological processes.

The project area is mostly located over three soil types spanning an elevated landscape consisting of gentle sloping hillsides and steep ravines ranging from 5-70 degree slopes, to abrupt limestone sandstone ridges and outcrops, at its lowest extent. The proposed action area is located in a semi-arid landscape ranging from 10-14 inches of annual precipitation, with a mean elevation of ~4,900ft.

Overall, these shallow soils found in the project area are largely gravelly loam at the surface, providing good drainage, before transitioning into more clay rich versions in the lower horizons. These shallow soil units stem from lower members of the Moenkopi geologic unit, which exemplifies the absence of calcium carbonate and lack of effervescences. The intermixed gravel is mostly from alluvial and colluvial remnants. Soil resilience is observed to be ample, given the abundant gravel content, surface composition, and adequate drainage.

Currently, soil erosion patterns typically present themselves in small rills to small gullies, which frequently flank or stem from roadside surfaces. These erosion features do not extend more than 10 meters (33 feet) from the disturbed soil road surfaces, attributed to the plentiful small to medium gravel content creating an armored topsoil surface. Overall, this soil erosion pattern is confined to disturbed surfaces such as roadway shoulders, and nearby cattle structures such as corrals and troughs.

The proposed action would continue grazing operations at their current capacities but potentially differing times of year. Direct impacts would include continued presence of cattle and human activity which would promote short duration soil compaction on less frequented portions of the allotment, while more evident soil compaction on the more frequented areas such as around watering infrastructure and cattle foraging corridors. Soil erosion patterns which are presently bound to disturbed surfaces would not enlarge from their present locations.

Indirect impacts of the proposed alternative would be minimal given the abundant gravel in the soils serving as an “armor” to compaction and erosion. However, some upper horizon soil loss is anticipated due to ruts and gullies in limited areas created by frequent livestock presence. This may result in increased soil depositions, as sediment transport from these ruts and gullies to beyond the project area. These fluvial, sorted, sediment dispositions would be susceptible to wind driven erosion and further seasonal fluvial erosion.

As stated, the proposed action seeks to continue cattle operations. The soil conditions would remain the same as no new structures would be constructed, and cattle foraging behavior would be non-repetitive, and likely to be intermittent/opportunistic in nature. Existing soil compaction would continue at the established structures creating avenues for ruts and gullies to form. Most impacts would occur as soil erosion accelerates in dry washes adjacent to access road surfaces.

Therefore, while the selected action will result in some limited adverse impacts, it is expected that soil integrity in the majority of the planning area and Monument will be unaffected or experience beneficial effects. As a result, soils will continue to be present in the Monument for the enjoyment of future generations, and there will be no impairment of Monument soils.

Vegetation including Special Status and Invasive, Non-native Plant Species

Vegetation within the allotments falls broadly under the Mojave Transition and Colorado Plateau floristic provinces. In particular, Whitmore Canyon in Big Spring Pipeline Allotment exhibits large areas on slopes dominated by Mojave Transition shrubs such as *Ephedra* spp. (Mormon tea). Higher elevation plateaus in both allotments form a patchy transitional landscape with *Juniperus osteosperma* (juniper), *Pinus edulis* (two-needle pinyon) and *Artemisia tridentata* (sagebrush) woodlands and savannas. The eastern edge of Big Spring Pipeline Allotment also hosts a juniper and pinyon transition to *Pinus ponderosa* (ponderosa pine) woodlands.

Alternately, or perhaps synergistically, several years of extreme to exceptional drought have inhibited the ability of seeds to germinate or plants to produce seeds. In some cases, apparent die off of woody shrubs and trees was observed in 2022, particularly in areas where ground water would be expected to accumulate in the bottom of slopes and valleys. The return of at least a partial typical monsoon in late 2022 may have ameliorated this condition as anecdotal evidence nearby saw a “green-up” of many woody plants thought to be dead.

Proposed action effectively changes only one aspect of previous grazing effects on vegetation: season of use on the Belnap Allotment. Shifting the season of use while adding no AUMs is a minor impact at most on the Belnap Allotment. It may have some beneficial impacts by allowing use to synchronize better with changing climate-related vegetation considerations such as timing of monsoons and other water events, and timing of seeding and flowering (ex. Zimmer 2022).

The permittee on the Big Spring Pipeline Allotment currently rests the pastures using a deferred rotation to allow growth and persistence of key forage species. Expanding the pasture rotation would temporally “space out” the use of a particular pasture, increasing the number and potentially the length of rest periods from livestock grazing. As stated in Section 2.3.1.1, this

would allow continued progress towards these pastures fully meeting LHE standards, while the Belnap Pastures (proposed Big Spring Pipeline North and South pastures) would continue to meet LHE standards.

An additional potential benefit to changing the season of use on the Belnap Allotment while retaining the current AUMs is the potential for a decrease in the actual number of cattle on the allotment at any one time (Tables 2.2 and 2.3). If this does indeed occur, the potential for the effects of large groups of cattle to create and widen trails would decrease, allowing for an increase in soil stability and, indirectly, a greater potential of seed germination and plants to reach maturity.

Special status species are not expected to be negatively impacted by Alternative A. Both *Y. baccata* and *C. whipplei* are common and persistent within the currently grazed Big Spring Pipeline Allotment, as is *C. whipplei* in Belnap Allotment. Continued grazing at current AUMs and expanded season of use should not change this. *P. distans* persists in Big Spring Pipeline Allotment under the current year-round season of use, there is potential of increased population size in pastures that may have longer rest rotations.

Effectively, there are no other impacts different than what is described in Section 4.2.2.2 - Direct and Indirect Impacts of Alternative B – Renew Permit for Belnap and Big Spring Pipeline Allotments with No Changes in Season of Use or Combination of Allotments. Please refer to that section for the remaining direct and indirect impact analysis of Alternative A.

Wildlife (including big game, sensitive species, and migratory birds)

Herbaceous vegetation provides forage and concealment cover for wildlife species, particularly during the spring breeding period when fawning, nesting, and rearing of young occurs. Livestock grazing reduces the height and amount of herbaceous vegetation. The presence of livestock and the movement of livestock between areas of use could result in the direct disturbance or displacement of some wildlife from preferred habitats, nesting/birthing sites, or water sources. Both the disturbance and displacement of wildlife and the reduction of herbaceous forage and cover could limit the productivity and reproductive success of some species. However, the livestock grazing in the proposed action allows the permittee to use the two allotments together rotating the cattle through the pastures of both allotments. This gives the ability to rest pastures or allotments from year to year. Using seasonal deferment and rest-rotation, vegetation would continue a static to upward trend, and therefore wildlife habitat components would be maintained or improved. This alternative proposes a longer season of use for the Belnap Allotment. Since the current season of use already includes the primary growing season for vegetation and the primary reproductive periods for most wildlife this change (expanded season of use) would minimally impact wildlife.

Big Game

Mule deer

Game Management Unit 13B is famous for producing large antlered "trophy" class mule deer bucks. The mule deer population is managed under alternative management guidelines which focus on the harvest of older age class, mature bucks. Mule deer exist at low densities throughout the unit in all habitat types and good numbers of deer can typically be found in the higher elevations, generally over 4,000 feet (AGFD & BLM 2015).

Mule deer occur in a wide variety of habitat types; although vegetative communities vary throughout the range of mule deer, habitat is nearly always characterized by areas of thick brush or trees interspersed with small openings. The thick brush and trees are used for escape cover whereas the small openings provide forage and feeding areas. Deer eat a wide variety of plants including browse, forbs and grasses. Deer are especially reliant on shrubs for forage during critical winter months. Fawn production is closely tied to the abundance of succulent, green forage during the spring and summer months.

Pronghorn

Pronghorn distribution in Unit 13B occurs primarily within the Belnap Allotment. The Belnap Allotment consists of poor-quality habitat for this species, with very low densities of pronghorn occurring within the allotment. While the presence of livestock and the trailing of livestock between use areas could displace does during fawning, pronghorn densities in this area are low so few does would be potentially affected. In addition, this potential for displacement would occur infrequently due to the rotational grazing system in place (see section 2.3.1 Alternative A - Proposed Action and 2.3.1.1 Grazing System Belnap Allotment).

Migratory Birds

The Migratory Bird Treaty Act of 1918 protects against the take of migratory birds, their nests, and eggs, except as permitted. An MOU between the BLM and USFWS states that the BLM shall: "At the project level, evaluate the effects of the BLM's actions on migratory birds during the NEPA process, if any, and identify where take reasonably attributable to agency actions may have a measurable negative effect on migratory bird populations, focusing first on species of concern, priority habitats, and key risk factors. In such situations, BLM will implement approaches lessening such take." (BLM and USFWS 2010)

The USFWS is mandated to identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act. The USFWS Birds of Conservation Concern 2021 (USFWS 2021) is the most recent effort to carry out this mandate. Bird species considered for the Birds of Conservation Concern include nongame birds, gamebirds without hunting seasons, subsistence-hunted nongame birds in Alaska, ESA candidate, proposed, and recently delisted species. Birds of Conservation Concern found on the Arizona Strip within the habitat types of the allotments are summarized in Table 1.0.

Table 1.0 USFWS Birds of Conservation Concern Likely Present in the Allotments.

Species	Habitat Type in the Project Area
Cassin's Finch	Small flocks sporadically occur in pinyon-juniper woodlands during the non-breeding season. Found in higher elevation habitat types such as ponderosa pine during the breeding season. Uncommon on the Arizona Strip.
Black-chinned Sparrow	Breeds in the chaparral habitat type within rocky canyons, especially where tall shrubs are present. Fairly common on the west side of the Arizona Strip within its habitat type.
Broad-tailed Hummingbird	This species uses open woodlands, especially pine, pine-oak, and pinyon-juniper. Fairly common across the Arizona Strip within its habitat type.
Clark's Nutcracker	Habitat includes open coniferous forest, forest edges, and clearings. Fairly common across the Arizona Strip within its habitat type.
Flammulated Owl	In the Colorado Plateau they are found mostly in ponderosa pine and sometimes in pinyon-juniper woodlands. Uncommon on the Arizona Strip.
Long-eared Owl	This species needs dense wooded areas for roosting and nesting that are near open areas for hunting. Nests in the tree nests of other birds and squirrels. Uncommon on the Arizona Strip.
Grace's Warbler	Breeds in ponderosa pine woodlands. Fairly common across the Arizona Strip within its habitat type.
Virginia's Warbler	Breeds in arid montane woodlands, oak thickets, pinyon-juniper, coniferous scrub, chaparral. Nests on ground among dead leaves, or in small depression under cover of bush, tufts of grass, etc. Fairly common across the Arizona Strip within its habitat type.
Burrowing Owl	This species is also designated as a BLM Sensitive Species and is addressed in Section 3.4.4.3
Pinyon Jay	This species is also designated as a BLM Sensitive Species and is addressed in Section 3.4.4.3

The current livestock management regime on these allotments has been in place for many years; it is therefore expected that livestock grazing proposed under this alternative would minimally affect habitat for migratory birds. Since utilization on vegetation is limited to 50% on the allotments, competition for forage between livestock and seed-eating migratory birds should be minimal and there is good grasses and palatable shrubs composition, leaving adequate resources for insect prey populations.

Sensitive Animal Species

Sensitive species are usually rare within at least a portion of their range. Many are protected under certain State and/or Federal laws. Species designated as sensitive by the BLM must be native species found on BLM-administered lands for which the BLM has the capability to significantly affect the conservation status of the species through management, and either:

1. There is information that a species has recently undergone, is undergoing, or is predicted to undergo a downward trend such that the viability of the species or a distinct population segment of the species is at risk across all or a significant portion of the species range; or
2. The species depends on ecological refugia or specialized or unique habitats on BLM-administered lands, and there is evidence that such areas are threatened with alteration such that the continued viability of the species in that area would be at risk."

All federally designated candidate species, proposed species, and delisted species in the 5 years following delisting are included as BLM sensitive species. Based on occurrence records and monitoring data, the sensitive species that may occur within the allotments and that may be affected by actions proposed in one of the alternatives presented in Chapter 2 are displayed in Table 2.0. No Threatened or Endangered species are documented in the project area. The only candidate or proposed T&E species potentially occurring in the project area is the monarch butterfly.

Table 2.0 Sensitive Species Potential within the Allotments

Species	Potential for Occurrence
American Peregrine Falcon (<i>Falco peregrinus</i>)	Verified
Golden Eagle (<i>Aquila chrysaetos</i>)	Verified
Ferruginous Hawk (<i>Buteo regalis</i>)	Potential
Northern Goshawk (<i>Accipiter gentilis</i>)	Verified
Western Burrowing Owl (<i>Athene cunicularia hypugae</i>)	Potential
Pinyon Jay (<i>Gymnorhinus cyanocephalus</i>)	Verified
Monarch Butterfly (<i>Danaus plexippus</i>)	Potential

Four additional sensitive species may also occur within the allotments. However, it has been determined by BLM wildlife biologists that these species would not be affected by actions proposed in this EA. These species are therefore not addressed further in this document (see EA Table 3.11).

Peregrine falcon (*Falco peregrinus*) and Golden eagle (*Aquila chrysaetos*)

Peregrine falcons utilize areas that range in elevation from 400 to 9,000 feet and breed wherever sufficient prey is available near cliffs. Preferred habitat for peregrine falcons consists of steep, sheer cliffs that overlook woodlands, riparian areas, and other habitats that support a high density of prey species. Nest sites are usually associated with water. In Arizona, peregrine falcons now occur in areas that had previously been considered marginal habitat, suggesting that populations

in optimal habitats are approaching saturation (AGFD 2022).

Nesting sites, also called eyries, usually consist of a shallow depression scraped into a ledge on the side of a cliff. Peregrine falcons are aerial predators that usually kill their prey in the air. Birds comprise the most common prey item, but bats are also taken (AGFD 2022).

Potential nesting habitat is found along the steep cliff faces of Whitmore and Parashant Canyons. Peregrine falcons may nest and forage within the allotments.

Nesting sites for peregrine falcons or golden eagles would not be impacted by livestock within the allotments because these sites are located on ledges in cliff faces that are inaccessible to livestock. Prey species for peregrine falcons, such as mourning doves, generally do well in human altered environments including grazed areas. Habitat for golden eagle prey species, such as black-tailed jackrabbits, could be adversely impacted if overutilization occurs. However, the effects of moderate grazing (such as that proposed under this alternative) can be negligible to slightly beneficial for many prey species (Olendorff 1993). Vegetation in the allotments is sufficient to provide food and shelter requirements for populations of prey species. Habitat for prey species would be minimally affected because grazing under this alternative provides periodic rest for the plant communities. Disturbance to nest sites from livestock management operations is unlikely given the remote and inaccessible locations these species choose for nesting. Implementation of this alternative is not likely to impact peregrine falcon or golden eagle habitat or nesting success.

Golden eagles are typically found in open country, prairies, arctic and alpine tundra, open wooded country and barren areas, especially in hilly or mountainous regions. Black-tailed jackrabbits and rock squirrels are the main prey species taken (Eakle and Grubb 1986). Carrion also provides an important food source, especially during the winter months. Nesting occurs on rock ledges, cliffs, or in large trees. Several alternate nests may be used by one pair and the same nests may be used in consecutive years or the pair may shift to an alternate nest site in different years. In Arizona they occur in mountainous areas and vacate desert areas after breeding. Nests were observed at elevations between 4,000 and 10,000 feet. Nests are commonly found on cliff ledges; however, ponderosa pine, junipers, and rock outcrops are also used as nest sites.

Potential nest sites occur along the cliff faces of Whitmore and Parashant Canyons. Eagles likely utilize the allotments for hunting and scavenging. The presence of water developments may attract small mammals, such as black-tailed jackrabbits, which are prey species for golden eagle.

Nesting sites for peregrine falcons or golden eagles would not be impacted by livestock within the allotments because these sites are located on ledges in cliff faces that are inaccessible to livestock. Prey species for peregrine falcons, such as mourning doves, generally do well in human altered environments including grazed areas. Habitat for golden eagle prey species, such as black-tailed jackrabbits, could be adversely impacted if overutilization occurs. However, the effects of moderate grazing (such as that proposed under this alternative) can be negligible to slightly beneficial for many prey species (Olendorff 1993). Vegetation in the allotments is sufficient to provide food and shelter

requirements for populations of prey species. Habitat for prey species would be minimally affected because grazing under this alternative provides periodic rest for the plant communities. Disturbance to nest sites from livestock management operations is unlikely given the remote and inaccessible locations these species choose for nesting. Implementation of this alternative is not likely to impact peregrine falcon or golden eagle habitat or nesting success.

Ferruginous hawk (*Buteo regalis*)

Ferruginous hawks are large hawks that inhabit the grasslands, deserts, and open areas of western North America – they are the largest North American hawk and are often mistaken for eagles due to their size. Ferruginous means “rusty color” and refers to the bird’s colored wings and legs. During the breeding season, they prefer grasslands, sagebrush, and other arid shrub country. Nesting often occurs in isolated trees or utility poles surrounded by open areas (Olendorff 1993). Mammals generally comprise 80 to 90 percent of the prey items or biomass in the diet with birds being the next most common mass component.

Suitable habitat for the ferruginous hawk is present on both allotments. Although nesting habitat is available, no nest sites are known to occur within the allotments.

Nesting sites and habitat for ferruginous hawk prey species have the potential to be impacted by livestock grazing within the allotments. Isolated nest trees used by this species could be impacted through rubbing of the trunk or by damaging the root system from congregations of cattle seeking shade; however, the likelihood of damaging these nest trees is minimal. Habitat for prey species, such as black-tailed jackrabbits, could be adversely impacted if overutilization occurs. However, the effects of moderate grazing (such as proposed under this alternative) can be negligible to slightly beneficial for many prey species (Olendorff 1993). Vegetation in the allotments is sufficient to provide food and shelter requirements for populations of prey species for the ferruginous hawk. Ferruginous hawks are sensitive to human disturbance near the nest site; however, no documented nests occur within the allotments so disturbance at nest sites would be sporadic and would not lead to a trend toward listing.

Northern Goshawk (*Accipiter gentilis*)

In Arizona, northern goshawks are found in coniferous forests in the northern, north central, and eastern parts of the state at elevations ranging between 4,750 to 9,120 feet (AGFD 2003). Goshawks in montane areas may winter on or near their home ranges or descend to lower elevations in woodlands, riparian areas, or scrublands (Reynolds et al. 1992). Northern goshawks generally nest in stands of mature trees with a home range of up to 6,000 acres which includes a nest area of 30 acres, a post-fledgling family area of 420 acres (also considered the defended territory), and a foraging area of 5,400 acres (Reynolds et al. 1992). On the Arizona Strip, goshawks most frequently occupy ponderosa pine forests. Their nest sites are typically located on northerly slopes with canopy cover of 50% or greater (Reynolds et al. 1992). Goshawks are opportunistic hunters that prey on a variety of birds and small mammals. Their main prey habitat attributes include snags, downed logs, woody debris, large trees, openings, and herbaceous and woody understories.

While ponderosa pine stands may be preferred, nests have been documented in pinyon-juniper woodlands with high canopy cover on the Dixie National Forest in Utah (Johansson et al. 1994) and in northwestern Colorado (Slater and Smith 2010).

The allotment contains enough ponderosa pine habitat to potentially support nesting territories. The allotment also contains pinyon-juniper woodlands which may contain suitable nest sites for goshawks as well as components desirable for foraging or winter use.

Properly managed grazing has not been identified as having potential adverse impacts on the northern goshawk or its prey base (Kennedy 2003). Continued utilization below 50% would not measurably impact the variety of bird and mammal species that goshawks prey upon.

Burrowing Owl (*Athene cunicularia hypogea*)

Burrowing owls occupy a wide variety of open habitats including grasslands, deserts, or open shrublands. Burrowing owls do not dig their own burrows and must rely on existing burrows dug by prairie dogs, ground squirrels, badgers, skunks, coyotes, and foxes but will also use manmade and other natural openings. Moderate grazing can have a beneficial impact on burrowing owl habitat by keeping grasses and forbs low (MacCracken et al. 1985) but the control of burrowing rodent colonies in grazed areas is believed to be a significant factor in the burrowing owl's decline (Desmond and Savidge 1996). Burrowing owls are infrequently encountered on the Arizona Strip likely due to the lack of prairie dog or other large rodent colonies.

Suitable habitat for the burrowing owl is present on the allotments. Although nesting habitat is available, no nest sites are known to occur within the allotments. No formal surveys have been conducted in the project area.

Nesting burrows for burrowing owls could potentially be impacted by livestock within the allotments through trampling. However, burrowing owls prefer open country with sparse vegetation and often do well in moderately grazed areas.

Prey species are numerous in the allotments and include small mammals, insects, and reptiles. Vegetation in the allotments is sufficient to provide food and shelter requirements for populations of prey species. Disturbance to nest sites from livestock management operations may occur but this species is known to tolerate moderate levels of human disturbance (Klute et al. 2003). Implementation of grazing under this alternative would result in relatively minor impacts to burrowing owl habitat or potential nesting success in the allotments.

Pinyon Jay (*Gymnorhinus cyanocephalus*)

The pinyon jay is a medium-sized corvid that inhabits much of the intermountain west and is particularly associated with pinyon-juniper ecosystems. Pinyon jays are highly social birds that nest communally and form large flocks that may number into the hundreds. Pinyon jays harvest seeds of pinyon pine, and to a lesser extent ponderosa and limber pine, during the fall and cache these seeds for use in late winter and early spring when other food sources are scarce (Balda &

Bateman 1971). Caches are often located in areas that receive little snow, such as under pine and juniper tree crowns or on south slopes where snow melts early, allowing the caches to be accessible during late winter and early spring (Wiggins 2005). Spatial memory is highly developed in pinyon jays and cache relocation is efficient and reliable (Stotz & Balda 1995). Seeds that are not relocated and consumed will often germinate and contribute to pinyon pine regeneration.

Pinyon jay habitat preferences include mosaics of large tracts of pinyon-juniper woodlands especially those areas that contain large, mature, seed-producing pinyon pines, and relatively open structure with mixed shrubs (especially sagebrush) and grasses (Latta et al. 1999). One nesting colony of pinyon jays typically requires an area of about 230 acres for nesting and about 5,120 acres for total home range (Balda & Bateman 1971).

Open-structure pinyon-juniper woodlands are found in the allotments and likely support foraging opportunities for pinyon jays.

While the potential effects of livestock grazing on pinyon jays are unclear, the policy of removing pinyon-juniper woodlands to promote grazing has resulted in habitat loss in several southwestern states (Wiggins 2005). However, no pinyon-juniper removals are proposed under this alternative, therefore impacts to nesting areas, tree canopy, or food sources would be negligible and similar to those described above for migratory birds.

Monarch Butterfly (*Danaus plexippus*)

Monarch butterflies breed throughout the United States, absent only from the forests of the Pacific Northwest. Breeding densities are highest from the east coast to the Great Plains, with typically low densities in the western states. Migration corridors are found east of the Rocky Mountains, in the Great Basin, and within California. Wintering areas are located along the California coast and in Mexico (Jepsen et al. 2015). Over the past 20 years a 90% decline in wintering monarchs has been detected in Mexico along with a 50% decline noted in California, leading to a petition for listing under the Endangered Species Act. The USFWS found that the species warranted listing as an endangered or threatened species under the Act, but that listing was precluded by higher priority listing actions (USFWS 2022).

Monarch larvae feed exclusively on 27 species of milkweed which can be found in a variety of habitats such as rangelands, agricultural areas, riparian zones, wetlands, deserts, and woodlands. In the western U.S. the two most important larval food sources are narrow-leaved milkweed (*Asclepias fascicularis*) and showy milkweed (*A. speciosa*). Adult monarchs forage on a wide variety of flowering plants for nectar during migration periods (Brower et al. 2006).

Monarchs may breed in low numbers within the allotments, although documentation is lacking. Migrating monarchs have been observed on the Arizona Strip in the fall in areas outside of the allotments.

Livestock grazing can alter the structure, diversity, and growth pattern of vegetation, which can affect the associated insect community. Grazing during a time when flowers are already scarce

may result in insufficient forage for the monarch butterfly. Recommended grazing BMPs (USDA 2015) for monarch butterflies and other pollinators include:

- Protect the current season's growth in grazed areas by striving to retain at least 50% of the annual vegetative growth on all plants.
- Minimize livestock concentrations in one area by rotating livestock grazing timing and location to help maintain open, herbaceous plant communities that are capable of supporting a wide diversity of butterflies and other pollinators.

These actions are incorporated into the proposed grazing systems for the allotments under this alternative. Implementation of grazing under this alternative would therefore result in relatively minor impacts to monarch butterflies and their habitat in the allotments.

Conclusion

The National Park Service has determined that implementation of the selected action will not constitute an impairment of the resources or values of GCPNM. This conclusion is based on consideration of the Monument's purpose and significance, a thorough analysis of the environmental impacts described in the EA, comments provided by the public and others, and the professional judgement of the decision maker guided by the direction of NPS Management Policies 2006.

Appendix D: Minimum Requirements Analysis



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MINIMUM REQUIREMENTS DECISION GUIDE WORKBOOK

"...except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act..."

-- The Wilderness Act of 1964

Project Title: Belnap and Big Spring Pipeline Allotments Grazing Permit Renewal
Environmental Assessment DOI-BLM-AZ-A030-2023-0002-EA/PEPC
111150

MRDG Step 1: Determination

Determine if Administrative Action is Necessary

Description of the Situation

What is the situation that may prompt administrative action?

A grazing permit renewal application has been received from Superior Cattle, LLC. the current permittee, to renew the ten-year grazing permit on the Belnap Allotment (AZ04849) and Big Spring Pipeline Allotment (AZ04870). The ten-year permit would apply to both NPS and BLM managed lands within the two allotments. The need for the proposed action is for the permittee to be able to continue livestock grazing on the allotments through utilization of forage at proper use levels. A key component of the grazing permit includes maintenance of existing grazing infrastructure to control cattle movement and supply water.

Options Outside of Wilderness

Can action be taken outside of wilderness that adequately addresses the situation?

☐ YES **STOP – DO NOT TAKE ACTION IN WILDERNESS**

☒ NO **EXPLAIN AND COMPLETE STEP 1 OF THE MRDG**

Explain:

Big Spring Pipeline Allotment includes both proposed and designated wilderness where cattle graze and needed infrastructure exists.

Criteria for Determining Necessity

Is action necessary to meet any of the criteria below?

A. Valid Existing Rights or Special Provisions of Wilderness Legislation

*Is action necessary to satisfy valid existing rights or a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws) that **requires** action? Cite law and section.*

☒ YES ☐ NO

Explain: The Wilderness Act of 1964, Section 4(d)(4)(2) “The grazing of livestock, where established prior to the effective date of this Act, shall be permitted to continue subject to such reasonable regulations as are deemed necessary by the Secretary of Agriculture.”

B. Requirements of Other Legislation

*Is action necessary to meet the requirements of **other federal laws**? Cite law and section.*

☒ YES ☐ NO

Explain: The Taylor Grazing Act of 1934 and the Federal Land Policy and Management Act of 1976 provide for livestock grazing use of the public lands that have been classified as available for grazing. Grazing use must be consistent with good range management aimed at conservation and protection of the natural and cultural resources.

43 Code of Federal Regulations PART 6300—MANAGEMENT OF DESIGNATED WILDERNESS AREAS §6304.25 What special provisions apply to livestock grazing? (a) If you hold a BLM grazing permit or grazing lease for land within a wilderness area, you may continue to graze your livestock provided that you or your predecessors began such use under a permit or lease before Congress established the wilderness area. (b) Your grazing activities within wilderness areas, including the construction, use, and maintenance of livestock management improvements, must comply with the livestock grazing regulations in part 4100 of this chapter.

Public Rangelands Management Act of 1995 Section 852 104 Congress requires a cooperative agreement for installation and maintenance of range improvements on public land. Failure to comply with a term, condition, or stipulation of a range improvement cooperative agreement or range improvement permit may result in penalties including:

(A) withhold issuance of a grazing permit or lease.

(B) suspend the grazing use authorized under a grazing permit or lease, in whole or in part;

(C) cancel a grazing permit or lease and grazing preference, or other grazing authorization, in whole or in part.

In addition, Grand Canyon-Parashant National Monument Proclamation 7265 (114 Stat 3236) states: “The Bureau of Land Management shall continue to issue and administer grazing leases within the portion of the monument within the Lake Mead National Recreation Area, consistent with the Lake Mead National Recreation Area authorizing legislation. Laws, regulations, and policies followed by the Bureau of Land Management in issuing and administering grazing leases on all lands under its jurisdiction shall continue to apply to the remaining portion of the monument.”

C. Wilderness Character

Is action necessary to preserve one or more of the five qualities of wilderness character?

UNTRAMMELED

☐ YES ☒ NO

Explain: This project is not necessary to preserve the untrammeled wilderness character.

UNDEVELOPED

☐ YES ☒ NO

Explain: This project is not necessary to preserve the undeveloped wilderness character.

NATURAL

☐ YES ☒ NO

Explain: This project is not necessary to preserve the natural wilderness character.

SOLITUDE OR PRIMITIVE & UNCONFINED RECREATION

☐ YES ☒ NO

Explain: This project is not necessary to preserve the solitude or primitive and unconfined recreation wilderness character.

OTHER FEATURES OF VALUE

☒ YES ☐ NO

Explain: Per the Grand Canyon-Parashant National Monument General Management Plan/Resource Management Plan “Sustainable, traditional ranching operations and associated interpretive activities showcase the Monument's historical lifestyles and enhance visitor experience.” (pg 1-23)

Step 1 Determination

*Is administrative action **necessary** in wilderness?*

Criteria for Determining Necessity

- | | |
|--|---|
| A. Existing Rights or Special Provisions | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |
| B. Requirements of Other Legislation | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |
| C. Wilderness Character | |
| Untrammeled | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| Undeveloped | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| Natural | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| Solitude/Primitive/Unconfined | <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| Other Features of Value | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |

Is administrative action **necessary** in wilderness?

☒ YES **EXPLAIN AND COMPLETE STEP 1 OF THE MRDG**

☐ NO **STOP – DO NOT TAKE ACTION IN WILDERNESS**

Explain:

The current allotment boundaries included in the proposed action to renew the grazing permit on the Belnap Allotment (AZ04849) and Big Spring Pipeline Allotment (AZ04870) encompass areas within both Mount Logan Wilderness and NPS proposed wilderness. Several pieces of legislation, including the Wilderness Act of 1964, direct that grazing activities “shall be permitted to continue within wilderness subject to reasonable regulations, policies, and practices” if they occurred prior to the designation of the wilderness.

MRDG Step 2
*Determine the **Minimum** Activity*

Other Direction

*Is there “special provisions” language in legislation (or other Congressional direction) that explicitly **allows** consideration of a use otherwise prohibited by Section 4(c)?*

AND/OR

Has the issue been addressed in agency policy, management plans, species recovery plans, or agreements with other agencies or partners?

☒ YES **DESCRIBE OTHER DIRECTION**

☐ NO **SKIP AHEAD TO TIME CONSTRAINTS BELOW**

Describe Other Direction:

Grand Canyon Parashant National Monument General Management Plan/ Resource Management Plan (2008a) page 2-75:

LA-GM-01- On BLM-administered lands, all allotments will continue to be classified as available for grazing by livestock under the principle of multiple use and sustained yield, except where specifically noted...

MA-GM-01- On NPS-administered lands, livestock grazing will be administered within NPS policy, the proclamation, and Lake Mead NRA enabling legislation, and verified through the Vital Signs monitoring program. On NPS-administered lands, when appropriate, the implementation of BLM standards and guidelines may be modified for use on NPS-administered lands by incorporating NPS Vital Signs initiatives. Any land health standards applied on NPS-administered lands will be in compliance with NPS Management Policies (2006).

The Mt. Trumbull - Mt. Logan Wilderness Management Plan (1990) addresses grazing infrastructure:

Management does not consider new structures or planned ignition fires as methods to achieve program objectives. As any existing structures require major reconstruction or costly maintenance, strong consideration is given to relocating the development outside the wilderness.

Under this plan, the majority of existing range improvement maintenance activities were determined to be non-motorized, however the plan allows for consideration for a motorized alternative if needed through the minimum tools and NEPA processes.

Time Constraints

What, if any, are the time constraints that may affect the action?

None

Components of the Action

What are the discrete components or phases of the action?

- Component 1: Transportation of personnel to project site
- Component 2: Transportation of materials to project site
- Component 3: Fence maintenance
- Component 4: Trough maintenance
- Component 5: Pipeline maintenance
- Component 6: Water catchment maintenance
- Component 7: Spring maintenance
- Component 8: Unfenced detention reservoir maintenance
- Component 9: Storage tank maintenance
- Component 10: Transportation of materials from site
- Component 11: Transportation of personnel from site
- Component 12: Livestock Grazing
- Component 13: Existing Infrastructure

Proceed to the alternatives.

Refer to the **MRDG Instructions** regarding alternatives and the effects to each of the comparison criteria.

MRDG Step 2: Alternatives

Alternative 1: Alternative A – Proposed Action Combine Belnap and Big Spring Pipeline Allotments, Extend the Season of Use for the Belnap Pastures, Implement a Nine-Pasture Rotation System, and Rename and Renew Permit for the New Combined Big Spring Pipeline Allotment

Description of the Alternative

*What are the details of this alternative? When, where, and how will the action occur?
What mitigation measures will be taken?*

Associated maintenance of existing facilities and improvements relevant to the grazing operation would be required and authorized. On an as-needed basis, existing range infrastructure would be maintained.

Fence maintenance would be composed of replacement of posts, wire, braces, stays, gates and clearing vegetation from encroachment on and accessing the improvement. All fences would be “wildlife-friendly”.

Authorized grazing would consist of the combining the Belnap and Big Spring Pipeline Allotments into one allotment that would then be renamed Big Spring Pipeline Allotment. The Belnap North and South pastures would become the Big Spring Pipeline Allotment North and South pastures. This would include extending the season of use from the current 12/1 – 5/15 use to year-round use in what is now the Belnap Allotment. This would allow grazing rotation between nine pastures rather than the current seven. There would be no proposed change in the total number of Animal Unit Months (AUM), limited to the current active preference and suspended AUMs for either allotment.

Water infrastructure maintenance would be composed of cleaning reservoirs, maintenance and/or replacement of troughs, pipelines, storage tanks and springs to maintain storage and water flow. Additional valves, floats, monitoring equipment may be replaced or installed at each location. Pipeline maintenance would involve replacement of pipeline and replacement or repair of valves. Replacement infrastructure components such as troughs and tanks would be hauled to the site and when possible, old infrastructure would be removed from site.

Component Activities

How will each of the components of the action be performed under this alternative?

Comp #	Component of the Action	Activity for this Alternative
1	Transportation of personnel to project site.	Personnel travel on established routes and then by foot or horseback to project sites.
2	Transportation of materials to project site.	When possible, equipment will be walked into the site. If not possible, the smallest size of equipment necessary to perform the task will be used to transport material where it might be used for fence, trough and storage tank access and replacement.
3	Fence maintenance	Replace fencing components such as t-posts, stays, slick and barbed wire using hand tools.
4	Trough maintenance	Use power hand tools to ensure that connecting components such a valves and hose clamps are securely fastened.
5	Pipeline maintenance	Use trencher, skid steer, backhoe or similar piece of machinery to run pipe in trench. Use power hand tools as needed to attach valves.
6	Water catchment maintenance	Use apron plastic welder, skid steer or backhoe to remove old catchment liner and place new liner. Use power hand tools as needed to attach valves.
7	Spring maintenance	Use skid steer or backhoe to remove debris from springhead. Use power hand tools as needed to attach valves.
8	Unfenced detention reservoir maintenance	Use skid steer, backhoe, or front-end loader to remove debris and silt.
9	Storage tank maintenance	Due to constant exposure out in the elements there would be a need to weld sections together that may need repairs.
10	Transportation of materials from site	When possible, equipment will be walked from site. If not possible, the smallest size of equipment to transport materials will be used.
11	Transportation of personnel from site	Personnel travel by foot from project sites and then on established routes.
12	Livestock Grazing	Season of use year-round on nine pasture rotation with 4700 AUMs.
13	Existing Infrastructure	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs and storage tanks.

Wilderness Character

*What is the effect of each component activity on the qualities of wilderness character?
What mitigation measures will be taken?*

UNTRAMMELED

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
1	Personnel travel on established routes and then by foot or horseback to project sites.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	When possible, equipment will be walked into the site. If not possible, the smallest size of equipment necessary to perform the task will be used to transport material where it might be used for fence, trough and storage tank access and replacement.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Replace fencing components such as t-posts, stays, slick and barbed wire using hand tools.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Use power hand tools to ensure that connecting components such as valves and hose clamps are securely fastened.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Use trencher, skid steer, backhoe or similar piece of machinery to run pipe in trench. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Use apron plastic welder, skid steer or backhoe to remove old catchment liner and place new liner. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Use skid steer or backhoe to remove debris from springhead. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8	Use skid steer, backhoe, or front-end loader to remove debris and silt.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	Due to constant exposure out in the elements there would be a need to weld sections together that may need repairs.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	When possible, equipment will be walked from site. If not possible, the smallest size of equipment to transport materials will be used.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
11	Personnel travel by foot from project sites and then on established routes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Season of use year-round on nine pasture rotation with 4700 AUMs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs and storage tanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Total Number of Effects		1	1	NE
Untrammled Total Rating		0		

Explain:

No new infrastructure would be constructed, components would only be maintained or replaced. Existing improvement components within the allotments would not impact what had previously been done and would not change it any further. While trammeling associated with grazing would continue, the effects of trammeling, including cattle trails and visible vegetation use by grazers, would be less concentrated due to a shift in grazing rotation between nine pastures rather than the current seven and would be a positive impact. Trammeling from the use of certain infrastructure by cattle would continue, a negative effect.

UNDEVELOPED

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
1	Personnel travel on established routes and then by foot or horseback to project sites.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	When possible, equipment will be walked into the site. If not possible, the smallest size of equipment necessary to perform the task will be used to transport material where it might be used for fence, trough and storage tank access and replacement.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Replace fencing components such as t-posts, stays, slick and barbed wire using hand tools.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Use power hand tools to ensure that connecting components such as valves and hose clamps are securely fastened.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Use trencher, skid steer, backhoe or similar piece of machinery to run pipe in trench. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
6	Use apron plastic welder, skid steer or backhoe to remove old catchment liner and place new liner. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	Use skid steer or backhoe to remove debris from springhead. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Use skid steer, backhoe, or front-end loader to remove debris and silt.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Due to constant exposure out in the elements there would be a need to weld sections together that may need repairs.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	When possible, equipment will be walked from site. If not possible, the smallest size of equipment to transport materials will be used.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Personnel travel by foot from project sites and then on established routes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Season of use year-round on nine pasture rotation with 4700 AUMs.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs and storage tanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Total Number of Effects		0	9	NE
Undeveloped Total Rating		-9		

Explain:

The use of motor vehicles and motorized equipment negatively impacts the undeveloped quality of wilderness character. The effect should be relatively short term and highly localized as the work would only occur at previous established installations within the allotment while repair activities are occurring. No new installations would be added, however existing installations would remain. The presence of cattle and the accompanying infrastructure have a negative effect on the undeveloped quality.

NATURAL

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
1	Personnel travel on established routes and then by foot or horseback to project sites.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	When possible, equipment will be walked into the site. If not possible, the smallest size of equipment necessary to perform the task will be used to transport material where it might be used for fence, trough and storage tank access and replacement.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Replace fencing components such as t-posts, stays, slick and barbed wire using hand tools.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Use power hand tools to ensure that connecting components such as valves and hose clamps are securely fastened.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Use trencher, skid steer, backhoe or similar piece of machinery to run pipe in trench. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Use apron plastic welder, skid steer or backhoe to remove old catchment liner and place new liner. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	Use skid steer or backhoe to remove debris from springhead. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Use skid steer, backhoe, or front-end loader to remove debris and silt.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Due to constant exposure out in the elements there would be a need to weld sections together that may need repairs.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	When possible, equipment will be walked from site. If not possible, the smallest size of equipment to transport materials will be used.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Personnel travel by foot from project sites and then on established routes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
12	Season of use year-round on nine pasture rotation with 4700 AUMs.	<input checked="" type="checkbox"/>		
13	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs and storage tanks.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Total Number of Effects		1	8	NE
Natural Total Rating		-7		

Explain:

The use of motor vehicles and/or motorized equipment negatively impacts the natural quality of wilderness character. The effect should be relatively short term and highly localized as the work would only occur at previous established installations within the allotment while repair activities are occurring. No new installations would be added. Shifting the grazing rotation between nine pastures than the current seven and extending the season of use rather would be a positive impact by potentially increasing the pasture rest period and allowing the native vegetation to grow with less frequent grazing pressure.

SOLITUDE OR PRIMITIVE & UNCONFINED RECREATION

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
1	Personnel travel on established routes and then by foot or horseback to project sites.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	When possible, equipment will be walked into the site. If not possible, the smallest size of equipment necessary to perform the task will be used to transport material where it might be used for fence, trough and storage tank access and replacement.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Replace fencing components such as t-posts, stays, slick and barbed wire using hand tools.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Use power hand tools to ensure that connecting components such a valves and hose clamps are securely fastened.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Use trencher, skid steer, backhoe or similar piece of machinery to run pipe in trench. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
6	Use apron plastic welder, skid steer or backhoe to remove old catchment liner and place new liner. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	Use skid steer or backhoe to remove debris from springhead. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Use skid steer, backhoe, or front-end loader to remove debris and silt.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Due to constant exposure out in the elements there would be a need to weld sections together that may need repairs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	When possible, equipment will be walked from site. If not possible, the smallest size of equipment to transport materials will be used.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Personnel travel by foot from project sites and then on established routes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Season of use year-round on nine pasture rotation with 4700 AUMs.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs and storage tanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Total Number of Effects		0	8	NE
Solitude or Primitive & Unconfined Rec. Total		-8		

Explain:

During transitory operations, the sense of solitude would be negatively impacted by loud noises during some activities. Seeing grazing infrastructure may negatively impact the sense of solitude.

OTHER FEATURES OF VALUE

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
1	Personnel travel on established routes and then by foot or horseback to project sites.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	When possible, equipment will be walked into the site. If not possible, the smallest size of equipment necessary to perform the task will be used to transport material where it might be used for fence, trough and storage tank access and replacement.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Replace fencing components such as t-posts, stays, slick and barbed wire using hand tools.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Use power hand tools to ensure that connecting components such a valves and hose clamps are securely fastened.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Use trencher, skid steer, backhoe or similar piece of machinery to run pipe in trench. Use power hand tools as needed to attach valves.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Use apron plastic welder, skid steer or backhoe to remove old catchment liner and place new liner. Use power hand tools as needed to attach valves.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Use skid steer or backhoe to remove debris from springhead. Use power hand tools as needed to attach valves.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Use skid steer, backhoe, or front-end loader to remove debris and silt.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Due to constant exposure out in the elements there would be a need to weld sections together that may need repairs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	When possible, equipment will be walked from site. If not possible, the smallest size of equipment to transport materials will be used.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Personnel travel by foot from project sites and then on established routes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Season of use year-round on nine pasture rotation with 4700 AUMs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
13	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs, and storage tanks.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total Number of Effects		9	0	NE
Other Features of Value Total Rating		9		

Explain:

Activities 3 through 9, 12 and 13 area necessary for the continued operations for proper grazing management in alignment with the intent of the GCPNM proclamation.

Summary Ratings for Alternative 1

Wilderness Character	Rating Summary
Untrammeled	0
Undeveloped	-9
Natural	-7
Solitude or Primitive & Unconfined Recreation	-8
Other Features of Value	9
Wilderness Character Summary Rating	-15

MRDG Step 2: Alternatives

Alternative 2: Alternative B – No Action Renew Permit for Belnap and Big Springs Pipeline Allotments with No Changes in Season of Use or Combination of Allotments

Description of the Alternative

*What are the details of this alternative? When, where, and how will the action occur?
What mitigation measures will be taken?*

Associated maintenance of existing facilities and improvements relevant to the grazing operation would be required and authorized. On an as-needed basis, range infrastructure would be maintained.

Fence maintenance would be composed of replacement of posts, wire, braces, stays, and gates. All fences would be “wildlife-friendly”.

The BLM would renew the existing grazing permit for the Belnap and Big Spring Pipeline Allotments with no changes. There would be no proposed change in season of use for the Belnap Allotment. Livestock grazing would occur during the current season of use for each allotment, and with the number of AUMs limited to the current active preference (3986 AUMs on Big Spring Pipeline Allotment and 714 AUMs on Belnap Allotment).

Water infrastructure maintenance would be composed of digging out catchments, reservoirs, troughs, storage tanks and springs to maintain storage and water flow. Additional valves, floats, monitoring equipment may be replaced or installed at each location. Pipeline maintenance would involve replacement of pipeline and replacement or repair of valves. New infrastructure components such as tanks would be hauled to the site. When possible, old infrastructure would be removed from site.

Component Activities

How will each of the components of the action be performed under this alternative?

Comp #	Component of the Action	Activity for this Alternative
1	Transportation of personnel to project site	Personnel travel on established routes and then by foot or horseback to project sites.
2	Transportation of materials to project site	When possible, equipment will be walked into the site. If not possible, the smallest size of equipment necessary to perform the task will be used to transport material where it might be used for fence, trough and storage tank access and replacement.
3	Fence maintenance	Replace fencing components such as t-posts, stays, slick and barbed wire using hand tools.

Comp #	Component of the Action	Activity for this Alternative
4	Trough maintenance	Use power hand tools to ensure that connecting components such as valves and hose clamps are securely fastened. .
5	Pipeline maintenance	Use trencher, skid steer, backhoe or similar piece of machinery to run pipe in trench. Use power hand tools as needed to attach valves.
6	Water catchment maintenance	Use apron plastic welder, skid steer or backhoe to remove old catchment liner and place new liner. Use power hand tools as needed to attach valves.
7	Spring maintenance	Use skid steer or backhoe to remove debris from springhead. Use power hand tools as needed to attach valves.
8	Unfenced detention reservoir maintenance	Use skid steer, backhoe, or front-end loader to remove debris and silt.
9	Storage tank maintenance	Due to constant exposure out in the elements there would be a need to weld sections together that may need repairs.
10	Transportation of materials from site	When possible, equipment will be walked from site. If not possible, the smallest piece of equipment to transport materials will be used.
11	Transportation of personnel from site	Personnel travel by foot from project sites and then on established routes.
12	Livestock Grazing	No changes to current season of use, allotments remain on separate rotation, with 4700 AUMs.
13	Existing Infrastructure	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs and storage tanks.

Wilderness Character

*What is the effect of each component activity on the qualities of wilderness character?
What mitigation measures will be taken?*

UNTRAMMELED

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
1	Personnel travel on established routes and then by foot or horseback to project sites.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	When possible, equipment will be walked into the site. If not possible, the smallest size of equipment necessary to perform the task will be used to transport material where it might be used for fence, trough and storage tank access and replacement.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Replace fencing components such as t-posts, stays, slick and barbed wire using hand tools.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Use power hand tools to ensure that connecting components such as valves and hose clamps are securely fastened	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Use trencher, skid steer, backhoe or similar piece of machinery to run pipe in trench. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Use apron plastic welder, skid steer or backhoe to remove old catchment liner and place new liner. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Use skid steer or backhoe to remove debris from springhead. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8	Use skid steer, backhoe, or front-end loader to remove debris and silt.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	Due to constant exposure out in the elements there would be a need to weld sections together that may need repairs.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	When possible, equipment will be walked from site. If not possible, the smallest size of equipment to transport materials will be used.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
11	Personnel travel by foot from project sites and then on established routes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	No changes to current season of use, allotments remain on separate rotation, with 4700 AUMs.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs and storage tanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Total Number of Effects		0	2	NE
Untrammee Total Rating		-2		

Explain:

No new infrastructure would be constructed, components would only be maintained or replaced. Existing improvement components within the allotments would not impact what had previously been done and would not change it any further. Trammeling associated with grazing and the use of certain infrastructure by cattle would continue, a negative effect.

UNDEVELOPED

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
1	Personnel travel on established routes and then by foot or horseback to project sites.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	When possible, equipment will be walked into the site. If not possible, the smallest size of equipment necessary to perform the task will be used to transport material where it might be used for fence, trough and storage tank access and replacement.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Replace fencing components such as t-posts, stays, slick and barbed wire using hand tools.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Use power hand tools to ensure that connecting components such a valves and hose clamps are securely fastened.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Use trencher, skid steer, backhoe or similar piece of machinery to run pipe in trench. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
6	Use apron plastic welder, skid steer or backhoe to remove old catchment liner and place new liner. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	Use skid steer or backhoe to remove debris from springhead. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Use skid steer, backhoe, or front-end loader to remove debris and silt.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Due to constant exposure out in the elements there would be a need to weld sections together that may need repairs.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	When possible, equipment will be walked from site. If not possible, the smallest size of equipment to transport materials will be used.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Personnel travel by foot from project sites and then on established routes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	No changes to current season of use, allotments remain on separate rotation, with 4700 AUMs.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs and storage tanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Total Number of Effects		0	9	NE
Undeveloped Total Rating		-9		

Explain:

The use of motor vehicles and motorized equipment negatively impacts the undeveloped quality of wilderness character. The effect should be relatively short term and highly localized as the work would only occur at previous established installations within the allotment while repair activities are occurring. No new installations would be added, however existing installations would remain. The presence of cattle and the accompanying infrastructure have a negative effect on the undeveloped quality.

NATURAL

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
1	Personnel travel on established routes and then by foot or horseback to project sites.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	When possible, equipment will be walked into the site. If not possible, the smallest size of equipment necessary to perform the task will be used to transport material where it might be used for fence, trough and storage tank access and replacement.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Replace fencing components such as t-posts, stays, slick and barbed wire using hand tools.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	Use power hand tools to ensure that connecting components such a valves and hose clamps are securely fastened.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Use trencher, skid steer, backhoe or similar piece of machinery to run pipe in trench. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Use apron plastic welder, skid steer or backhoe to remove old catchment liner and place new liner. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	Use skid steer or backhoe to remove debris from springhead. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Use skid steer, backhoe, or front-end loader to remove debris and silt.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Due to constant exposure out in the elements there would be a need to weld sections together that may need repairs.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	When possible, equipment will be walked from site. If not possible, the smallest size of equipment to transport materials will be used.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Personnel travel by foot from project sites and then on established routes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	No changes to current season of use, allotments remain on separate rotation, with 4700 AUMs.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
13	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs, and storage tanks.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Total Number of Effects		0	9	NE
Natural Total Rating		-9		

Explain:

The use of motor vehicles and/or motorized equipment negatively impacts the natural quality of wilderness character. The effect should be relatively short term and highly localized as the work would only occur at previous established installations within the allotment while repair activities are occurring. No new installations would be added. Continued cattle grazing would potentially limit or decrease the abundance and growth of vegetation.

SOLITUDE OR PRIMITIVE & UNCONFINED RECREATION

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
1	Personnel travel on established routes and then by foot or horseback to project sites.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	When possible, equipment will be walked into the site. If not possible, the smallest size of equipment necessary to perform the task will be used to transport material where it might be used for fence, trough and storage tank access and replacement.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Replace fencing components such as t-posts, stays, slick and barbed wire using hand tools.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Use power hand tools to ensure that connecting components such a valves and hose clamps are securely fastened	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Use trencher, skid steer, backhoe, or similar piece of machinery to run pipe in trench. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Use apron plastic welder, skid steer or backhoe to remove old catchment liner and place new liner. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	Use skid steer or backhoe to remove debris from springhead. Use power hand tools as needed to attach valves.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
8	Use skid steer, backhoe, or front-end loader to remove debris and silt.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Due to constant exposure out in the elements there would be a need to weld sections together that may need repairs.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	When possible, equipment will be walked from site. If not possible, the smallest size of equipment to transport materials will be used.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Personnel travel by foot from project sites and then on established routes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	No changes to current season of use, allotments remain on separate rotation, with 4700 AUMs.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs, and storage tanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Total Number of Effects		0	8	NE
Solitude or Primitive & Unconfined Rec. Total		-8		

Explain:

During transitory operations, the sense of solitude would be negatively impacted by loud noises during some activities. Seeing grazing infrastructure may negatively impact the sense of solitude.

OTHER FEATURES OF VALUE

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
1	Personnel travel on established routes and then by foot or horseback to project sites.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	When possible, equipment will be walked into the site. If not possible, the smallest size of equipment necessary to perform the task will be used to transport material where it might be used for fence, trough and storage tank access and replacement.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Replace fencing components such as t-posts, stays, slick and barbed wire using hand tools.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
4	Use power hand tools to ensure that connecting components such as valves and hose clamps are securely fastened.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Use trencher, skid steer, backhoe or similar piece of machinery to run pipe in trench. Use power hand tools as needed to attach valves.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Use apron plastic welder, skid steer or backhoe to remove old catchment liner and place new liner. Use power hand tools as needed to attach valves.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Use skid steer or backhoe to remove debris from springhead. Use power hand tools as needed to attach valves.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Use skid steer, backhoe, or front-end loader to remove debris and silt.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Due to constant exposure out in the elements there would be a need to weld sections together that may need repairs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	When possible, equipment will be walked from site. If not possible, the smallest size of equipment to transport materials will be used.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Personnel travel by foot from project sites and then on established routes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	No changes to current season of use, allotments remain on separate rotation, with 4700 AUMs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs and storage tanks.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total Number of Effects		9	0	NE
Other Features of Value Total Rating		9		

Explain: Necessary for the continued operations for proper grazing management during activities 3-9.

Summary Ratings for Alternative 2
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Wilderness Character	Rating Summary
Untrammeled	-2
Undeveloped	-9
Natural	-9
Solitude or Primitive & Unconfined Recreation	-8
Other Features of Value	9
Wilderness Character Summary Rating	-19

MRDG Step 2: Alternatives

Alternative 3: Alternative C – No Grazing

Description of the Alternative

*What are the details of this alternative? When, where, and how will the action occur?
What mitigation measures will be taken?*

No maintenance of grazing infrastructure would occur, including boundary fences. Reissue a grazing permit on the Belnap and Big Spring Pipeline Allotments with zero authorized AUMs for active preference – all AUMs would be suspended (i.e., livestock grazing would be deferred for the ten-year permit period). In ten years, the allotments would be re-evaluated. Range improvements would not be maintained by the permittee for this ten-year term.

Component Activities

How will each of the components of the action be performed under this alternative?

Comp #	Component of the Action	Activity for this Alternative
1	Transportation of personnel to project site	None
2	Transportation of materials to project site	None
3	Fence maintenance	None
4	Trough maintenance	None
5	Pipeline maintenance	None
6	Water catchment maintenance	None
7	Spring maintenance	None
8	Unfenced detention reservoir maintenance	None
9	Storage tank maintenance	None
10	Transportation of materials from site	None
11	Transportation of personnel from site	None
12	Livestock Grazing	None
13	Existing Infrastructure	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs and storage tanks.

Wilderness Character

*What is the effect of each component activity on the qualities of wilderness character?
What mitigation measures will be taken?*

UNTRAMMELED

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
1	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs and storage tanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Total Number of Effects		1	1	NE
Untrammed Total Rating		0		

Explain:

While trammeling associated with grazing would cease for the duration of the ten-year permit, the effects of trammeling, including cattle trails would decrease, a positive impact. Trammeling from the continued presence of certain infrastructure would continue, a negative effect.

UNDEVELOPED

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
1	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
5	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs, and storage tanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Total Number of Effects		0	1	NE
Undeveloped Total Rating		-1		

Explain:

Grazing infrastructure is not proposed to be removed. The negative effect of the infrastructure would continue to impact the undeveloped quality of wilderness character.

NATURAL

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
1	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
11	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	None	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs, and storage tanks.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Total Number of Effects		1	0	NE
Natural Total Rating		1		

Explain:

Removing cattle grazing would be a positive impact by allowing the native vegetation to grow without grazing pressure.

SOLITUDE OR PRIMITIVE & UNCONFINED RECREATION

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
1	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs and storage tanks.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Total Number of Effects		0	1	NE
Solitude or Primitive & Unconfined Rec. Total		-1		

Explain:

Seeing grazing infrastructure may negatively impact the sense of solitude.

OTHER FEATURES OF VALUE

Activity #	Component Activity for this Alternative	Positive	Negative	No Effect
1	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	None	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	None	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	None	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	None	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	None	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	None	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	None	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	None	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	None	<input type="checkbox"/>	<input type="checkbox"/>	X
11	None	<input type="checkbox"/>	<input type="checkbox"/>	X
12	None	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
13	Twenty-two existing pieces of infrastructure including fences, troughs pipelines, water catchments, developed springs, reservoirs and storage tanks.	<input type="checkbox"/>	<input type="checkbox"/>	x
Total Number of Effects		0	8	NE
Other Features of Value Total Rating		-8		

Explain:

Removing grazing for a period of ten years, while not maintaining grazing infrastructure, would negatively impact the grazing management intent in the monument proclamation for the area.

Summary Ratings for Alternative 3
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Wilderness Character	Rating Summary
Untrammeled	0
Undeveloped	-1
Natural	1
Solitude or Primitive & Unconfined Recreation	-1
Other Features of Value	-8
Wilderness Character Summary Rating	-9

MRDG Step 2: Alternatives Not Analyzed

Alternatives Not Analyzed

What alternatives were considered but not analyzed? Why were they not analyzed?

We did consider the use of helicopters to sling load materials to locations within allotment, however it was not analyzed due to the proximity of existing roads in the vicinity of the allotment.

We did consider dynamite for the creation of replacements and maintenance of water catchments; however, it was found that this tool is not necessary for the terrain.

Alternative to permanently close or retire the two subject allotments was considered. The need for the proposed action is for the permittee to be able to continue livestock grazing on the allotments through utilization of forage at proper use levels. This alternative would not meet the purpose and need of this analysis, which is for the BLM to evaluate an application to renew the grazing permit for the two subject allotments for a ten-year term. Monitoring data and recent land health evaluations support the conclusion that the two allotments are either making significant progress towards or meeting land health standards. Therefore, this alternative was not carried forward for further analysis.

MRDG Step 2: Alternative Comparison

Alternative 1: Alternative A – Proposed Action Combine Belnap and Big Spring Pipeline Allotments, Extend the Season of Use for the Belnap Pastures, Implement a Nine-Pasture Rotation System, and Rename and Renew Permit for the New Combined Big Spring Pipeline Allotment

Alternative 2: Alternative B – No Action Renew Permit for Belnap and Big Springs Pipeline Allotments with No Changes in Season of Use or Combination of Allotments

Alternative 3: Alternative C – No Grazing

Wilderness Character	Alternative 1+	Alternative 1-	Alternative 2+	Alternative 2-	Alternative 3+	Alternative 3-
Untrammelled	1	1	0	2	1	1
Undeveloped	0	9	0	9	0	1
Natural	1	8	0	9	1	0
Solitude/Primitive/Unconfined	0	8	0	8	0	1
Other Features of Value	9	0	9	0	0	8
Total Number of Effects	11	26	9	28	2	11
Wilderness Character	-15		-19		-9	

MRDG Step 2: Determination

Refer to the **MRDG Instructions** before identifying the selected alternative and explaining the rationale for the selection.

Selected Alternative

Alternative 1: Alternative A – Proposed Action Combine Belnap and Big Spring Pipeline Allotments, Extend the Season of Use for the Belnap Pastures, Implement a Nine-Pasture Rotation System, and Rename and Renew Permit for the New Combined Big Spring Pipeline Allotment

Alternative 2: Alternative B – No Action Renew Permit for Belnap and Big Springs Pipeline Allotments with No Changes in Season of Use or Combination of Allotments

Alternative 3: Alternative C – No Grazing

Explain Rationale for Selection:

In each of the three alternatives analyzed, grazing infrastructure is already present within the designated and proposed wilderness within Big Spring Pipeline allotment. Alternative 1 and 2 do not differ in regards to activities in wilderness. Alternative 3, no grazing, is not in alignment with current legislation, including the Taylor Grazing Act, Wilderness Act of 1964, and 43 CFR Part 6300. In addition, the Grand Canyon-Parashant National Monument General Management Plan/Resource Management Plan directs all allotments on BLM administered lands to be “classified as available for grazing by livestock” (BLM 2008). Alternative 1 was selected to align with current legislative and management plan guidance.

Describe Monitoring & Reporting Requirements:

The designated and proposed wilderness within Big Spring Pipeline allotment are regularly monitored using rangeland monitoring plots, condition assessment evaluations and other techniques related to ecosystem health and visitor use. These would be required to continue under this EA. Rangeland infrastructure activities would be reported as part of the grazing permit. In addition, monitoring of activities, especially those with ground disturbance, would be monitored by appropriate staff, contractors and partners.

Approvals

Which of the prohibited uses found in Section 4(c) of the Wilderness Act are approved in the selected alternative and for what quantity?

Approved?	Prohibited Use	Quantity
<input checked="" type="checkbox"/>	Mechanical Transport:	11 (per site, number of times will depend on the level of maintenance required)
<input checked="" type="checkbox"/>	Motorized Equipment:	11 (per site, number of times will depend on the level of maintenance required)
<input type="checkbox"/>	Motor Vehicles:	
<input type="checkbox"/>	Motorboats:	
<input type="checkbox"/>	Landing of Aircraft:	
<input type="checkbox"/>	Temporary Roads:	
<input type="checkbox"/>	Structures:	
<input type="checkbox"/>	Installations:	

Record and report any authorizations of Wilderness Act Section 4(c) prohibited uses according to agency policies or guidance.

Refer to agency policies for the following signature authorities:

Prepared:

Name Greg Page

Position Outdoor Recreation Planner

Signature _____

Recommended:

Name Jennifer Fox

Position Ecologist

Signature _____

Approved:

Name Ben Roberts

Position Superintendent

Signature _____

Approved:

Name Brandon Boshell

Position Monument Manager

Signature _____