Bibkey
661626

United States Department of the Interior
Bureau of Land Management

Grand Canyon-Parashant National Monument

Environmental Assessment

Belnap West Allotment Grazing Permit Renewal

EA-AZ-130-2006-0025

I. INTRODUCTION

This Environmental Assessment (EA) analyzes the proposed grazing permit renewal for the Belnap West allotment. The action culminates an evaluation conducted on the allotment under the Arizona BLM Standards for Rangeland Health and Guidelines for Grazing Management (S&Gs). In addition, this EA looks at the present allotment management, and determines 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 this allotment are necessary. This EA is intended to evaluate the findings of the Belnap West assessment as it relates to vegetation conditions and resource values in the allotment. This is done in an effort to balance demands placed on the resources by various authorized uses within the allotment.

Analysis of existing allotment data indicate that species composition and vegetation cover objectives are being met and species frequency are trending upward. The Interdisciplinary Assessment Team (IAT) determined during the assessment process, that resource conditions on the allotment are meeting Standards for Rangeland Health.

Purpose and Need

The purpose and need of this action is to renew the grazing permit associated with the Belnap West grazing allotment (#4822) for a period of ten years. The Belnap West grazing allotment is located 60 miles south-southwest of St. George, Utah, in the northwest portion of Arizona on lands managed by Bureau of Land Management in the Grand Canyon-Parashant National Monument.

Conformance with Land Use Plan

This proposal is found to be in conformance with the Arizona Strip District Resource Management Plan (RMP) dated January 1992, as amended April 1997. The RMP adopted resource specific activity plans from the Shivwits Grazing EIS (July, 1980), including allotment management plans. The Shivwits Grazing EIS proposed that the Belnap West allotment should continue to be managed under a seasonal grazing rotation.

Grand Canyon Parashant National Monument

Belnap West is within the Grand Canyon Parashant National Monument. Designation of the monument does not, in and of itself, require modification of the current grazing practices. The presidential proclamation states that "Laws, regulations, and policies followed by the Bureau of Land Management (BLM) in issuing and administering grazing leases on all lands under its jurisdiction shall continue to apply…". However, Interim Management Guidelines (IM 2002-008, October 11, 2001) have been established to guide management while current planning efforts are under way. These guidelines postpone the implementation of new range improvement projects (fences, pipelines, vegetative treatments) until a new Resource Management Plan (RMP) is completed. Under the Antiquities Act; BLM must protect objects identified in the presidential proclamations that establish national monuments. Therefore, if BLM determines, through the current planning process or otherwise, that any monument objects are harmed by current management, then management (including permit conditions) will be modified accordingly.

Relationships to Statutes, Regulations, or other Plans

This action is in conformance with Arizona's Standards and Guides, which were developed through a collaborative process involving the Arizona Resource Advisory Council and the Bureau of Land Management State Standards and Guidelines team. The Secretary of the Interior approved the Standards and Guidelines in April 1997. The Decision Record, signed by the BLM Arizona State Director (April 1997) provided for full implementation of the Standards and Guides in all Arizona BLM Land Use Plans

Grazing permit renewals are also provided for in 43 CFRs 4100 where the objectives of 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,....; to establish efficient and effective administration of grazing of public rangelands;....", and as provided for in the Land Use Plans in accordance with multiple-use objectives, requirements and provisions of established laws, regulations and BLM policies incorporating Desired Plant Community (DPC) objectives using the Ecological Site Index approach.

Grazing management practices of the Belnap West allotment are in conformance with Arizona Standards for Rangeland Health and Guidelines for Grazing Administration. These practices are intended to assist management in meeting the Standards for Rangeland Health.

Renewal of the Belnap West permit conforms to the President's National Energy Policy and would not have adverse energy impacts. This action would not deny energy projects, withdraw lands, close roads or in any other way deny or limit access to mineral materials to support energy actions.

Issues raised relating to Standards for Rangeland Health

Identification of issues for the Belnap West S&G evaluation and this assessment were

accomplished by the Rangeland Resources Team (RRT), Interdisciplinary Assessment Team (IAT), and livestock permittee during scoping on October 22, 2003. Two specific issues relating to rangeland health were brought forward. A field visit to the allotment was conducted on November 12, 2003. The RRT, IAT, and livestock permittee were present for the field trip. The two issues recognized during this process but not analyzed further in this EA are listed below.

- Maintenance of the 900 acre chaining treatment

  To ensure long-term vegetation diversity and achievement of DPC objectives, future maintenance treatments of the persistent woody species (i.e. juniper, pinyon and sagebrush) will be required. Maintenance methods could include prescribed fire, herbicide, or a selective mechanical method. Currently, DPC objectives at the key area are being met, however, the RRT recommended the area receive maintenance work in the future to make certain objectives continue to be met.

  Data collected at the key area suggests that understory species are not being lost, but that woody species such as sagebrush (*Artemisia tridentata*) and Utah juniper (*Juniperous utahensis*) have slightly increased in frequency since base line data was established. In fact, data shows an increase in key grass species since base line data was collected in 1982. A more detailed analysis would ensue at the time of project implementation.

- The presents of *Bromus techtorum* (Brte) cheatgrass at various locations.

  Upon further evaluation by the RRT during the field tour, it was concluded that cheat grass was a non-issue on BLM administered lands within the allotment. After much discussion in the field, the RRT determined that although cheat grass presence was observe on the allotment, it is associated with a healthy mix of perennial native vegetation on private lands and poses no imminent threat to overall rangeland health. It occurs in small random areas, not in large monoculture stands. It is unlikely cheat grass composition at current levels will alter fire return intervals across the allotment. In addition, monitoring data at the key area shows no increase in composition or frequency of cheat grass that would displace native vegetation.

  While livestock can be a cause for weed establishment, they are not the only factors contributing to weed establishment and invasion in the West. Anthropogenic causes of soil disturbance such as outdoor recreationalists, off-road vehicles (ORVs), trucks, road construction, and logging; and natural causes such as wildfire, burrowing animals, wind, floods, and natural erosion enhance the vulnerability of communities to invasion (Belsky and Gelbard 2000). Avian species are another factor in spreading weed seed sources in the West.

Current Planning Process

The Arizona Strip District Office is currently involved in a planning process that will result in three stand alone RMPs, one for each new National Monument and one for the Arizona Strip outside of the monuments. No grazing changes are currently anticipated for the Belnap West allotment. However, there may be modifications as a result of the new RMPs. The 10- year grazing permit, in part, states "This permit is subject to (A) modification, suspension or cancellation as required by land plans and applicable law; (B) annual review and to modification of terms and conditions as appropriate; ...". BLM may use these permit conditions to implement any changes required under the new RMPs.

II. PROPOSED ACTION AND ALTERNATIVES

Proposed Action (Renewal of 10 Year Grazing Permit with current terms and conditions)

The Proposed Action is to renew the grazing permit on the Belnap West allotment for a period of ten years with current terms and conditions. Under this alternative, BLM would:

- Cancel the existing annual permit (Table 2) and reissue term (ten year) grazing permit on the Belnap West allotment as listed in Table 1. Livestock grazing would occur during the season of use, and with the number of AUMs, shown in Table 1.
- Adopt all criteria associated with the proposed grazing decision as the interim Allotment Management Plan (AMP) for the Belnap West allotment until a future AMP is finalized. Criteria would include the proposed season of use, livestock numbers, desired plant community and vegetation cover objectives, billing schedule, monitoring, and the associated maintenance of facilities/improvements (pasture and boundary fences, reservoirs, and corrals) relevant to the grazing operation and permit.

- Consider, through the NEPA process any new range improvements to assist in grazing practices and promote rangeland health.

Table 1 - Proposed Action Permit Issuance

Allotment Name	Permittee	Permit Number	Livestock			Active AUMs	Public Land (acres)	% Public Land
			No.	Kind	Season of Use			
Belnap West	NA	4822	30	Cattle	10/16-05/20	204	4,317	95%

The annual grazing permit for the Belnap West allotment is shown below in Table 2. Under the proposed action the annual permit would be cancelled and reissued in accordance with Table 1.

Table 2 – Annual Grazing Permit								
Allotment Name	Permittee	Permit Number	Livestock			Active AUMs	Public Land (acres)	% Public Land
			No.	Kind	Season of Use			
Belnap West	NA	4822	30	Cattle	10/16-05/20	204	4,317	95%

Alternatives Considered But Rejected For Further Analysis

Alternatives are tiered to the Arizona Strip District RMP (January, 1992) and the Shivwits Grazing EIS (July, 1980) which was adopted into the RMP and are basically the same for this action. The Grazing EIS addressed five alternatives: Full Stocking with Management, Stocking Level by Condition Class, No Vegetation Manipulation, Elimination of Grazing on Public Lands, and Less Intensive Management of Livestock Grazing.

The following three alternatives were considered for this EA but rejected because they were analyzed in the RMP, to which this document is tiered.

- **Full Stocking with Management alterative** would allow stocking at the estimated livestock carrying capacity of the allotment with no reductions for the rest pasture in rest-rotation grazing systems.

- **Stocking Level by Condition Class alternative** would set the stocking level based on the average condition and apparent trend of the allotment.

- **No Grazing Alternative (Elimination of Livestock Grazing on Public Lands).** The decision to authorize livestock grazing in this area and specifically on the Belnap West allotment is documented in the approved land use plan. The absence of new information or other land use plan decisions showing that continued livestock grazing would preclude BLM from meeting or making significant progress toward achieving land health standards renders the existing land use plan authorizing grazing valid. A no grazing alternative or not renewing a grazing permit would not conform to the land use plan. A plan amendment would be required before closing an allotment to livestock grazing.

The Grazing System Description for the Belnap West Allotment

The Belnap West allotment does not have an official Allotment Management Plan (AMP). The allotment was once a part of the Belnap West/Mule Canyon AMP grazing system. At that time, Belnap West received summer grazing use with 30 head of livestock. An ownership change in 1986 split the two allotments and removed it from the AMPs grazing system. The season of use was also changed at that time from summer use to winter use, however livestock numbers remained at 30 cattle. The allotment has operated as a winter use allotment since that time.

Livestock from the allotment are taken to private pasture for summer (May 20 to October 15).

The allotment is grazed as one winter unit with no interior pasture fences. Allotment size, season of use, and topography lend itself to self-regulated livestock distribution.

Grazing Preference and Current Use on the Allotment

Belnap West

Livestock Numbers	Season of Use	% Federal	Active AUMs
30 Cattle	10/16 to 05/20	95%	204
		Total	204

Terms and Conditions of Grazing Permit

Grazing would be in accordance with the grazing preference, livestock numbers, and season of use specified on the grazing permit. Billing for grazing use would be based on the actual use report which is due on or before June 30 each year. Livestock may be moved 15 days before or after scheduled move dates.

Desired Plant Community (DPC)

This EA also incorporates by reference the "Implementation of Standards for Rangeland Health and Guidelines for Grazing Administration, Belnap West Allotment S&G Assessment" (2004)[1]. The Belnap West Allotment Assessment lists and evaluates achievement of the allotments DPC objectives summarized below. These objectives are expressed in species composition by weight and percent vegetation cover.

Belnap West Key Area (Loamy Upland 10-14" p.z.)

- Maintain perennial grass composition between 50-70% through 2030 by,
  - Maintaining Hija CBW between 10 to 15%
  - Maintaining Spcr CBW between 1 to 10%
  - Maintaining Orhy CBW between 1 to 5%
  - Maintaining Sihy CBW between 5 to 10%
- Maintain shrub CBW between 15-40% through 2030.
- Maintain forb CBW between 2-10% through 2030.
- Maintain tree CBW between 0 to 5% through 2030.

[1]Belnap West Allotment S&G Assessment, available at the Bureau of Land Management, Arizona Strip Field Office, 345 E. Riverside Drive, St. George, Utah 84790.

Monitoring

The goals of monitoring would be to determine if the fundamentals or conditions of Rangeland Health are being met within the allotment area under 43 CFR 4180. These conditions of Rangeland Health are:

> (a) Watersheds are in, or are making significant progress toward, properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage, and the release of water that are in balance with climate and land form and maintain or improve water-quality, water quantity, and timing and duration of flow.
>
> (b) Ecological processes, including the hydrologic cycle, nutrient cycle, and energy flow, are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.
>
> (c) Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving, established BLM management objectives such as meeting wildlife needs.
>
> (d) Habitats are, or are making significant progress toward being restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species.

To monitor rangeland health conditions, key areas as defined in the *Monitoring* "Planning for Monitoring", "TR 4400-1", (1984) would be used. The key area would be used as an indicator area to reflect the effect of on the ground management on the site they represent. Each key area would be established based on a Range Site/Ecological Site (developed by the Natural Resource Conservation Service, (NRCS)) with a specific Potential Natural Community (PNC) and specific physical site characteristics. Knowing the PNC of the area, and using the ecological site descriptions as a guide, DPC objectives can be developed. The DPC then becomes the objectives by which management actions would be measured.

Dry Weight Rank (DWR) method of data collection would be used to monitor species composition. In addition, Pace Frequency and Step-Point studies would be used at each key area to detect changes of individual species and vegetative cover, which indicates a trend and status of basal and foliar cover. Pace Frequency, Step-Point and DWR would be completed on each key area every 3-6 years. DWR and Pace Frequency study methods are described in *Sampling Vegetation Attributes*, "Interagency Technical Reference 1734-4" (1996).

Livestock use on forage plants would be determined by conducting grazing utilization studies using the Grazed-Class Method as described in the *Utilization Studies and Residual Measurements* "Interagency Technical Reference 1734-3" (1996). Utilization studies would be completed annually in each grazing unit by BLM prior to and/or after livestock have been removed from the pasture. Study data would be compiled each year. Other information to be

collected and compiled is precipitation, actual use, etc. All monitoring data would be used to evaluate current management and assist BLM in making management decisions that helps achieve vegetation objectives on the allotment.

Analysis of existing allotment data suggests DPC objectives are being met. It was determined by the Interdisciplinary Assessment Team (IAT) during the assessment process, that resource conditions on the allotment are meeting Standards for Rangeland Health.

Allotment compliance would be conducted annually on the allotment. Compliance monitoring assures terms and conditions of the permit and any other subsequent requirements attached to range improvement permits are being met.

Based on analyses of the allotment's monitoring data and supporting documentation contained in the Belnap West S&G Assessment Report (2004), resource conditions on the allotment meet all applicable standards for rangeland health.

III. AFFECTED ENVIRONMENT

The Belnap West grazing allotment is located 60 miles south of St. George, Utah, in the northwest portion of Arizona on lands managed by the BLM. The allotment is within the boundaries of T. 34 and 35 N., R. 10 & 11 W., southwest of Bundyville. Elevations range from 5,320' in the sagebrush draws to 5,520' on the pinyon-juniper ridges.

The affected environment is tiered to the Arizona Strip District RMP (January 31, 1992), Affected Environment pages III-1 to III-58, and pages 41 to 92 of he Shivwits Grazing EIS (July, 1980) which was adopted into the RMP and are essentially the same for this action. Chapter 2 of the Shivwits Grazing EIS describes the environmental components likely to be impacted by the proposed action. Environmental components discussed in the EIS that might affect or be affected by the proposal are: Climate, Vegetation, Threatened and Endangered Plant Species, Riparian Vegetation, Soils, Water Resources, Animals (wildlife), Cultural Resources, Visual Resources, and Land Uses including livestock grazing and recreation.

This EA also incorporates by reference the "Implementation of Standards for Rangeland Health and Guidelines for Grazing Administration, Belnap West Allotment S&G Assessment" (2004)[2]. This S&G Assessment describes the resources and issues applicable to the allotment area. See the Belnap West Allotment S&G Assessment Appendix for other resource data and associated information.

The following critical elements of the human environment or resources are not present in the allotment or would not be affected by the proposed action or alternatives.

---

[2] Belnap Allotment S&G Assessment, available at the Bureau of Land Management, Arizona Strip Field Office, 345 E. Riverside Drive, St. George, Utah 84790.

- Air Quality
- Native American Religious Concerns
- Water Quality, Drinking or Ground
- Wilderness
- Wild & Scenic Rivers
- Wetlands/Riparian Areas
- Areas of Critical Environmental Concern (ACECs)
- Wild Horses and Burros
- Minerals
- Hazardous Materials

Climate

Average annual precipitation on the allotment is approximately 9-13". Since there is no rain gauge on the allotment, the two nearest gauges at Alcorn and Bundyville are used to interpret annual rainfall amounts. The Alcorn rain gauge is located in T35N, R10W, Sec.30, approximately 1 mile north of the allotment boundary. Average precipitation is ~13.02" annually. Approximately 12 percent (1.58") comes in the fall, 30 percent (3.94") in the winter, 19 percent (2.44") in the spring and 39 percent (5.05") in the summer.

The Bundyville rain gauge is located in T35N, R9W, Sec.19, approximately 3 miles northeast of the allotment. Average precipitation is 10.88" annually. Approximately 13 percent (1.42") comes in the fall, 24 percent (2.63") in the winter, 24 percent (2.56") in the spring, and 39 percent (4.27") in the summer. Even though the two rain gauges differ in the amount of annual rain fall, seasonal distribution of the precipitation is very similar.

Vegetation

The principal vegetative type[3] within the allotment is pinyon-juniper woodlands with associated sagebrush and grass understory.

- The pinyon-juniper type includes pinyon, juniper, sagebrush, cliffrose, desert holly, banana yucca, blue grama, sand dropseed, squirrel tail and vàrious forbs.

This vegetative type consists of two dominant ecological sites[4] that are part of the Major Land Resource Units, as defined by the NRCS. The limestone ridges and slopes are classified as a Shallow Loamy Upland 9-13" precipitation zone (pz). The draws, swales, and bottoms are classified as Loamy Uplands 9-13" pz.

---

[3] Shivwits Grazing Environmental Impact Statement

[4] An ecological site is a distinctive kind of land that differs from other kinds in its ability to produce a characteristic plant community. Each ecological site is a product of all environmental factors responsible for its development. Each site is capable of producing and supporting a plant community typified by an association of species that differs from other ecological sites in species kind, proportion and total production.

Water Sources

Belnap allotment contains:

- 1 fenced reservoir
- 3 unfenced reservoirs
- 1 wildlife catchment

Threatened and Endangered (T&E) Species

There is no suitable habitat for any listed threatened or endangered species on the allotment. However, the bald eagle (*Haliaeetus leucocephalus*), and the California condor (*Gymnogyps californianus*) may occasionally fly over the area. There are no riparian areas that would provide habitat for the southwestern willow flycatcher (*Empidonax trailii extimus*). An experimental non-essential population (as defined under section 10J of the Endangered Species Act) of California condors was established on the Vermillion Cliffs in 1996. These birds may eventually forage on carrion within the allotment but have not yet been observed doing so. No other, federally listed T&E species are known to occur in the area covered by this EA.

BLM Sensitive and State Species of Concern

Ferruginous hawks (*Buteo regalis*) are known to forage over grassland habitat similar to that found on the allotment, though specific sightings have not been recorded for the area. Black-crowned night Heron (*Nysticorax nycticorax hoactli*) and snowy egrets (*Egretta thula brewsteri*) have occasionally been observed using stock tanks in the area, but have not been recorded on the allotment. A variety of sensitive bat species have been captured on neighboring allotments including Townsend's big-eared (*Corynorhinus townsendii*), spotted bats (*Euderma maculatum*), small-footed myotis (*Myotis ciliolabrum*), fringed myotis (*Myotis thysanodes*), and big free-tailed bats (*Nyctinomops macrotis*).

Wildlife

The Hurricane Valley provides habitat for a herd of from 100 to 150 pronghorn antelope (*Antilocarpa Americana*). However, pronghorn have not been observed in the allotment, or in areas surrounding the Belnap West allotment. BLM and Arizona Game and Fish do not consider the allotment suitable habitat for pronghorn due to the abundance of sagebrush and juniper trees. It is unlikely that pronghorn occur on the allotment.

Mule deer (Odocoileus hemionus) occur in limited numbers on the allotment. However, the area is not considered prime mule deer habitat. The area is included within Game Management Unit (GMU) 13B.

Nongame wildlife found on the allotment is typical of the area, including a variety of small mammals, grassland birds, raptors, and reptiles. All waters within this arid region are important

for wildlife

Soil

The only soils monitoring data for this area is the Phase 1 Watershed Conservation and Development Inventory of 1971-1973 (See Field Office Files 7300). It was based upon a general soils map and thus ended up as broad interpretations and averages over large areas. Other more specific and detailed soils information is as follows:

Soil Map Units , SSA 623

33 Havasupai very gravelly loam, 1 to 5 percent slopes, (fan terrace), mixed alluvium; Limey Upland, 9" to 13" ppt

45 Mellenthin-Rock outcrop-Torriorthents complex, 10 to 70 percent slopes (hills) Kaibab; Mellenthin-Shallow Loamy, 9" to 13"; Torriorthents-Breaks, 9" to 13"

45 Mellenthin-Strych Complex, 4 to 25 percent slopes, cool, (plateaus, mesas), limestone; Mellenthin-Shallow Loamy, 9" to 13"; Strych-Loamy Upland, 9" to 13"

51 Meriwhitica-Rock outcrop-Strych complex, 35 to 70 percent slopes, (cliffs, canyons) Callville & Redwall limestones; Meriwhitica-Breaks, 9" to 13"; StrychLoamy Upland, 9" to 13"

The watershed area within the allotment was classified as Category IV in the 1992 RMP. This category includes watershed units that are less resistant to erosion, but would be responsive to treatment. Most of the Belnap West allotment is currently in fair to good erosion condition or demonstrates fair to good resistance to erosion. Old gullies are healing into smaller, vegetated drainages. Therefore, watershed units within the allotment are being reclassified to Category II. Category II watershed units are considered to be in satisfactory erosion condition or more resistant to withstand erosive events.

Lithology

The Belnap West allotment consists mainly of Kaibab limestone, Moenkopi mudstones and gypsum hills and ridges with associated alluvial fans and floodplains. Steep limestone walls of the Parashant Canyon are at the allotments south end.

Cultural/Historical

Prehistoric and Historical sites exist throughout the allotment.

Visual Resources

The 1992 RMP classified this area as Visual Resource Management Class (VRM) Class IV. VRM Class IV represents lands with low visual resource values when compared to others in the region.

Livestock Grazing

The Belnap West Allotment (#4822) is comprised of 4,317 acres of federal BLM land and 129 acres of private land. The total number of active AUMs on the allotment is 204. The current season of use is 10/16 to 05/20.

Recreation Resources

The Belnap West Allotment is considered to have recreation value for its scenic qualities, remoteness, and solitude. General recreation activities include: recreational OHV use, driving for pleasure, camping, hunting, photography and bird watching.

The following resources are not present in the allotment and are therefore not affected by the proposed action or alternatives:

- Wilderness
- Wild & Scenic Rivers
- Wetlands/Riparian Areas
- Areas of Critical Environmental Concern (ACECs)
- Wild Horses and Burros
- Minerals
- Hazardous Materials

Noxious Weeds

No noxious weeds have been detected on the allotment. However, the allotment is monitored for noxious weeds annually as a part of the compliance inspections. Any noxious weeds are treated upon discovery.

Socio/Economic

Economic revenue generated from the Arizona Strip is mainly ranching with a few gypsum/selenite mines and uranium operations. Nearby communities are supported by tourism (including outdoor recreation), construction and light industry. The social aspect involves remote, unpopulated settings with moderate to high opportunities for solitude.

IV. ENVIRONMENTAL IMPACTS

The following critical elements of the human environment are not affected by the proposed action or alternatives or are not present:

- Air Quality
- Native American Religious Concerns

- Water Quality, Drinking or Ground

Only impacts that may result from implementing the proposed action or alternatives are described in this EA. If an ecological component is not discussed, it should be assumed that the resource specialists have considered effects to the component and found the proposed action or alternatives would have minimal or no effects.
General effects from projects similar to the proposed action alternative are also described in the documents to which this plan is tiered.

This document incorporates by reference the Belnap West Allotment S&G Assessment (2004), which provides a complete discussion, analysis and summaries of the range resources and associated issues. Also, see the Belnap West S&G Assessment Appendix for specific resource data and other associated information.

Climate

Implementing the Proposed Action would have no effect on the climate. The proposed action would allow affected resources to respond to the climate with improvement to these resources, as mentioned below in the vegetation section.

Drought

In response to drought conditions, BLM may modify the terms and conditions of a grazing permit (ie. number of cattle, turn out dates, removal dates, etc.) temporarily or on a more long-term basis. Most modifications are accomplished on a cooperative basis with the livestock permittee. However, if a permittee disagrees with BLM's assessment of the resource conditions or the necessary modifications, BLM may nevertheless issue a Full Force and Effect Grazing Decision to protect resources.

Vegetation

Grazing impacts on vegetation under the Proposed Action are mitigated by timing of use, duration of grazing, adjusting of stocking rates, and conformance with Standards and Guidelines for Grazing Management. The Proposed Action would have an established season of use for grazing livestock. This use period would be late fall, winter, and early spring. This season of use allows rest during growing cycles and which permits cool and warm season grasses and browse to elongate their apical buds, build vigor and achieve seed ripe.

Under the Proposed Action, the following impacts to vegetation could be expected.

- Majority of grazing use on vegetation would occur during plant dormancy
- Vegetation would be rested the entire summer growing season each year
- Livestock distribution would improve with winter season of use. During cooler

temperatures livestock are less dependant on water, thus increasing foraging distance over the allotment and reducing time loafing near water sources.

The allotments' major vegetation component consists mainly of pinyon-juniper woodlands with an associated understory of sagebrush, cliffrose, desert holly, blue grama, squirrel tail, sand dropseed, and a variety of forbs.

Vegetation issues identified on the Belnap West allotment were the maintenance of a 900 acre chaining treatment and the presence of Bromus tectorum (cheatgrass) at various locations. For a complete analysis and discussion of these issues refer to the Belnap West Allotment S&G Assessment pages 7, 13, and 17.

Monitoring data (1990 to 2003) of the Belnap West allotment indicates that the key area is in an upward trend of frequency and utilization has been well below allowable levels. These data reflect and suggest that current management coupled with precipitation would allow objectives for the vegetation components to be met on the allotment. These vegetation components constitute the ecological sites upon which DPC objectives are based. Key areas are established on ecological sites and monitored to determine the species composition, the frequency of plant species, and the vegetative ground cover.

Table 5. Summary of pace-frequency and vegetation cover data collected on Belnap West Allotment from1982 to 2000. Figures shown are frequency percentages.

Belnap West	Year	% Key Species	Live Veg. Cover	Litter	Total
	1982	66	1	21	88
	1985	108	16	26	150
	1988	105	7	36	148
	1992	98	9	41	148
	1995	98	7	43	148
	2003	86	11	24	121

Utilization data from 1987-2003 has been compiled for this evaluation. The Key Species Grazed Class method was used to collect the data. Utilization is read at or around the designated key area for each pasture or allotment.

Overall utilization levels on the allotment averaged 41% for all key species over the evaluation period, which is below the 45% allowable on allotments with no AMP. In 1987 and 1989 grazing use on Orhy exceeded the 45% allowable at 51% and 66% respectively. In 1988 and 1989, use levels on Atca also exceeded the 45% level at 62% and 80%. All other years of the evaluation period, utilization was below 45%. Overall utilization on cool season grasses for the evaluation period is 41%. Overall utilization on warm season grasses for the evaluation period is 34%. The overall utilization on browse species is 47%.

Threatened and Endangered (T&E) Species

The Proposed Action would have no impact on any listed threatened or endangered species nor would the Proposed Action have an impact on an occasional fly over by the bald eagle or California condor.

BLM Sensitive Species

The Proposed Action would have no substantial impact on BLM sensitive and state species of concern. These species include the avian species, Ferruginous hawk, Black-crowned Night Heron, and snowy egret and sensitive bat species such as Townsend's big eared, spotted bats, small-footed myotis, fringed myotis and big free-tailed bats.

Wildlife

The Proposed Action would have no substantial impacts on big game (mule deer and pronghorn) or the other nongame wildlife found on the allotment. The area north of the allotment provides habitat for a herd of pronghorn antelope (*Antilocarpa Americana*). Pronghorn however, have not been observed in the Belnap West allotment. The allotment is not considered suitable habitat for pronghorn due to the abundance of sagebrush and juniper trees. It is unlikely that pronghorn occur on the allotment.
Mule deer (Odocoileus hemionus) and all big game species populations are monitored annually by the Arizona Game and Fish Department. Mule deer survey data for the Game Management Unit 13B, which includes the Belnap West Allotment, includes direct counts by sex and age class. The number of mule deer counted in this area varied considerably over the 18 year period from 1985 to 2003, from a low of 31 in 1992 to a high of 275 in 2001. (see appendices). There is no estimate of mule deer numbers available specifically for this allotment. The number of mule deer counted may not accurately reflect population trends due to variations and other inherent biases in survey techniques.

Unit 13B is considered by Arizona Game and Fish Department to be low productivity habitat for mule deer. Summer range is limited to a few small areas on Black Rock (30 miles north) and Poverty Mountains (4 miles west), Mt. Dellenbaugh (20 miles southwest) and Whitmore Canyon (10 miles east). Much of the remainder of the area is covered by pinyon-juniper woodlands with variable understory. Areas that have been chemically or mechanically treated, such as at Twin Points and Low Mountain, have seen dramatic increases in mule deer populations. Cliffrose is a favored browse species for mule deer in this area and appears to be readily available. Mule deer also rely on forbs which can be plentiful in years with adequate precipitation or nearly absent in dry years.

While this allotment does not provide optimum conditions for mule deer, the reasons are likely related to lack of precipitation on limited summer range habitat and encroachment of pinyon-juniper woodlands. Despite this, mule deer populations continue to increase slowly and are stable. Mule deer would benefit from increased treatments in decadent pinyon-juniper habitat.

At present, habitat conditions are conducive to continued, though slow, expansion of the mule deer herd and are appropriate relative to site potential.

Migratory Birds

Executive Order 13186 requires BLM and other federal agencies to work with the U.S. Fish and Wildlife Service to improve protection for migratory birds. Implementation of the Proposed Action is not likely to adversely affect any species of migratory bird known or suspected to occur on the allotment. No take of any such species is anticipated.

Soil

Attributes making up the soil resource should remain stable or improve thru implementation of the Proposed Action and the enforcement of the Arizona Standards and Guides process for permitted livestock grazing within the Belnap West grazing allotment. Grazing during the season of use associated with the Proposed Action allows for seasonal plant rest resulting in increased vigor and allowing ground litter and cover to increase, thus protecting the soil. Utilization levels are within that allowable and current trends are up.

Cultural Resources

There would be no substantial impact to cultural or historical sites as a result of renewing this grazing permit under the Proposed Action. Cultural resources project file AZ BLM 100-2002-18 contains documentation of compliance with Section 106 of the National Historic Preservation Act. Great efforts are made to avoid these sites during allotment project implementation. Further, archaeological inventories are completed prior to all project initiation.

Visual Resources

No additional adverse impacts on visual resources have been identified.

Livestock Grazing

Under the Proposed Action, the forage preference would remain active and livestock grazing would continue on the allotment.

Possible Future Range Improvement Projects

There is one range improvement project described below being proposed during the ten-year life of the renewed grazing permit. This EA does not analyze the impacts of the project in detail. The project is inside of the National Monument and the appropriate NEPA analysis would occur prior to any action being taken.

1. Implement actions to maintain the 900 acre Belnap West chaining treatment area. The objective of this maintenance action is to prevent aggressive reinvasion of woody species and retain a high composition of herbaceous understory species throughout the existing treatment. This action would be consistent with maintaining allotment DPC objectives.

Recreation Resources

Recreation in the area is primarily composed of driving for pleasure, recreational OHV use, horseback riding, hiking, backpacking, camping, hunting, photography and nature study. No impact to recreation is expected from the Proposed Action.

Cumulative Impacts

Cumulative Impacts are tiered to the Arizona Strip RMP (1992), Environmental Consequences pages IV-36 to IV-38, and to chapter 3 of the Shivwits Grazing EIS (1980) which was adopted into the RMP. Unavoidable Adverse Impacts, Relationship between Local Short-term Uses of Man's Environment, Maintenance and Enhancement of Long-term Productivity, and the Irreversible and Irretrievable Commitments of Resources were discussed.

Cumulative impacts occur when additional management facilities are added to those already present. Grazing plans set specific objectives in the plan area and include rangeland improvements that are designed to maintain or improve wildlife habitat, watershed, and overall resource conditions, thus improving ecosystem health.

Past, present, and reasonably foreseeable actions within the analysis area would continue to influence range resources, naturalness, aesthetics, watershed conditions and trends. The impact of land treatments targeting woody species, 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. No cumulative impacts are predicted to the range resource as a result of the Proposed Action.

Residual Impacts

Residual Impacts are tiered to the Arizona Strip RMP (1992), Irreversible and Irretrievable Commitments of Resources page 172 of the Shivwits Grazing EIS (1980) which was adopted into the RMP. Though the Proposed Action does not propose any new fences, it does allow for the existence of present fence lines, which do create some restrictions of free passage, but do not prevent or prohibit passage of mule deer. Nor are other forms of wildlife using the area restricted by existing fences.

There are no residual impacts as a result of the Proposed Action to the vegetative resource. Future maintenance of existing vegetation treatments would likely take and would not affect

additional acres beyond that done previously. Residual impacts from maintenance activities would be improved watershed conditions, wildlife habitat, and rangeland resources over time.

Monitoring

The monitoring addressed in the proposed action (pages 6-7) is sufficient to identify changes in vegetation as a result of livestock grazing activities. In addition to those methods described, there are efforts in place to inventory for noxious weed establishment, as well as monitor treated areas for treatment effectiveness. BLM weed specialist (LD Walker) has the lead on monitoring and treating noxious weeds on the Arizona Strip. He has provided training in identification and treatment as well as ways to reduce the spread of weeds to BLM employees and permittees.

Annual allotment compliance would be included in monitoring conducted on the allotment. Compliance monitoring would assure terms and conditions of the permit are being met. Compliance checks would also monitor any special conditions or mitigation included in Cooperative Agreements, Section 4 Permits, or other grazing regulations.

Mitigation

When noxious weeds are located, various methods are used for their control depending on the size of the infestation and growth stage of the plants. The methods include but are not limited to:

Physical or mechanical
Biological
Chemical or Cultural

If vegetative monitoring indicates current livestock grazing practices are causing non-attainment of resource objectives, BLM would modify the terms and conditions of a grazing permit (i.e. number of cattle, turn out dates, removal dates, etc.) temporarily or on a more long-term basis. Most modifications are accomplished on a cooperative basis with the livestock permittee. However, if a permittee disagrees with BLM's assessment of the resource conditions or the necessary modifications, BLM may nevertheless issue a Full Force and Effect Grazing Decision to protect resources.

V. CONSULTATION AND COORDINATION

This EA was prepared by the Bureau of Land Management, Arizona Strip Field Office, 345 E. Riverside Drive, St. George, UT 84790. Phone (435) 688-3200. Public involvement for the Belnap West S&G evaluation began on October 22, 2003. An assessment field trip to the allotment was conducted on November 12, 2003. The Interdisciplinary Assessment Team (IAT) was assisted by the Rangeland Resources Team (RRT) appointed by the Arizona Resource Advisory Council. The final evaluation was sent out for public review and comment to 66 Individuals, Groups and Agencies. BLM received two comment responses on the evaluation. Those comments are addressed in this EA.

Interdisciplinary Assessment Team (IAT)

Linda Price.....Project Coordinator
Whit Bunting....Range/Grazing
John Herron.....Archaeologist
Robert Smith....Soils, Watershed
Larry Gearhart.....Wilderness/Recreation
Mike Small.....Wildlife Biologist
Robert Price.....Field Supervisor,
Arizona Game and Fish Department

Internal Reviewers:

Gloria Benson, Native American Coordinator
Tom Folks, Recreation
Laurie Ford, Lands/Realty/Minerals
Mike Small, Wildlife
John Herron, Cultural
Lee Hughes, T/E Plants
Ray Klein, GCPNM Supervisory Ranger
Linda Price, S&G Coordinator
Bob Sandberg, Range
Richard Spotts, Environmental Coordinator
Ron Wadsworth, Supervisory Law Enforcement
Kathleen Harcksen, Assistant Monument Manager
Dennis Curtis, GCPNM Manger

Reviewed by Arizona Strip District Office Planning and Environmental Coordinator (P&EC)

Richard Spotts

MARCH 29, 2006

Richard Spotts,
P&EC

Date

FINDING OF NO SIGNIFICANT ENVIRONMENTAL IMPACT

The Environmental Assessment AZ-130-2006-0025, hereby incorporated by reference, analyzed a livestock grazing permit renewal action conducted under the Arizona BLM Standards for Rangeland Health and Guidelines for Grazing Management (S&Gs) where an intensive allotment evaluation was conducted with public and other agency involvement throughout the process. Analysis of existing study data indicates that overall Ecological Condition trends are static or up and pace frequency trends are improving on the allotment. The resource conditions on the allotment are meeting Standards for Rangeland Health. Issues were analyzed and it was determined that current management is not a factor in preventing attainment of Standards.

The Environmental Assessment reaffirmed the allotment's current grazing practices, and determines that the present grazing management program would continue to allow improvement to the health of public land resources, such as soil, water, vegetation, wildlife habitat, and wildlife and other resource values.

Based on the analysis of Environmental Assessment AZ-130-2006-0025, I have determined that the renewal of the Belnap West Livestock Grazing Permit with current terms and conditions will not have a significant effect on the human environment. Therefore, an environmental impact statement will not be prepared.

Dennis Curtis — 3/20/06

Manager,
Grand Canyon-Parashant National Monument

Date