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1.0 Introduction

This Environmental Assessment (EA) analyzes the proposed action and alternatives for lease renewal and associated range improvements for the Limestone allotment. This EA will incorporate the data analysis from the Rangeland Health Evaluation dated April, 2014 and reference monitoring data gathered March 6, 2013.

The BLM is proposing to fully process the term grazing permit on the Limestone Allotment in accordance with all applicable laws, regulations, and policies. Grazing lease No. 45080 expired on February 28, 2014. The BLM proposes to renew the lease pursuant to Section 15 of the Taylor Grazing Act of 1934 as amended and consultation, coordination and cooperation with affected individuals, interested publics, States, and Indian Tribes; completion of the applicable level of National Environmental Policy Act (NEPA) review; consultation with the United States Fish and Wildlife Service (USFWS) under Section 7 of the Endangered Species Act; and ensuring that allotments are achieving or making significant progress toward achievement of land health standards. The lease was renewed under the current grazing rider until the lease can be fully processed through analysis in this EA, and the S&G evaluation that is part of this process.

The Limestone Allotment is located on both sides of Highway 77 between Winkelman and Globe in Cochise County. The allotment contains 9,130 acres, of which 91 % is public lands. The allotment is authorized for Grazing Preference of 589 AUMs with a Suspended preference of 123 AUMs. Prior to 1975, the allotment was authorized at 1,124 AUM's. In 1975, the preference was reduced to 700 AUM's. In 1981 it was reduced from 700 AUM's to 577 AUM's based on utilization studies. This reduction was implemented over a five year period which went into effect in 1985. In 1986, the permit was increased by 19 AUM's to 596 AUM's due to some state trust lands becoming public land, which resulted in a permitted use of 719 AUM's.

The allotment is divided into two pastures by the private lands in the valley bottom of Dripping Springs Wash and Highway 77. Grazing occurs mainly on the pasture on the north side the allotment as it is the larger pasture, which is on the Mescal Mountains. The pasture on the south side of the allotment is steeper hillsides of the Dripping Springs Mountains. The flatter lands along Dripping Springs wash were homesteaded in the 1920 and are fenced out of the allotment.

There are 18 identified mining shafts and adits in the south pasture on the Dripping springs mountains that provide some water for livestock. This area is covered by many mining claims, with most being held by Freeport-McMoran mining, which holds the adjacent open pit copper mine at Christmas.

The Desert Grasslands ACEC was established through the Safford RMP on several parcels, one of which is on the north end of this allotment. The ACEC was established with the following prescriptions: Mineral withdrawal (part of ACEC), closed to OHVs, acquire state/private lands if available, no livestock, prescribed fire plan. The management prescription for the exclusion of livestock from the Desert Grasslands Area of Critical Environmental Concern affects only lands not currently accessible to livestock, including the parcel on the Limestone Allotment.

1.1 Purpose and Need

The purpose of this action is 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 A).

The need for this action is established by the Taylor Grazing Act of 1934 (TGA), the Federal Land Policy and Management Act of 1976 (FLPMA), and the Safford District Resource Management Plan (RMP) approved January 1992, which require that the BLM respond to applications to fully process and renew permits to graze livestock on public land. Grazing lease No. 45080 expires on February 28, 2014. In detail, the analysis of the actions identified in the applications for grazing permit renewals and the alternative actions is needed because:

- BLM Arizona adopted the Arizona Standards for Rangeland Health (Land Health Standards) and Guidelines for Livestock Grazing Management in all Land Use Plans (Arizona S&Gs) in 1997 (Appendix A). Land Health Standards for Rangelands should be achieving or making significant progress towards achieving the standards and to provide for proper nutrient cycling, hydrologic cycling, and energy flow. Guidelines direct the selection of grazing management practices and, where appropriate, livestock facilities to promote significant progress toward, or the attainment and maintenance of, the standards. Rangeland health assessments and evaluation reports completed for the Limestone Allotment identified all standards being met.
- The Safford District Resource Management Plan (RMP) identifies resource management objectives and management actions that establish guidance for managing a broad spectrum of land uses and allocations for public lands in part of the Tucson Field Office. The Safford District Resource Management Plan (RMP) allocated public lands within the Limestone Allotment, as available for domestic livestock grazing. Where consistent with the goals and objectives of the RMP and Land Health Standards, allocation of forage for livestock use and the issuance of grazing permits to qualified applicants are provided for by the Taylor Grazing Act (TGA) and the Federal Land Policy and Management Act (FLPMA).

1.2 Decision to be Made.

The Tucson Field Manager is the authorized officer responsible for the decisions regarding management of public lands within this allotment. Based on the results of the NEPA analysis, the authorized officer will issue a determination of the significance of the environmental effects and whether an environmental impact statement (EIS) would be required. If the authorized officer determines that it is not necessary to prepare an EIS, the EA will provide information for the authorized officer to make an informed decision whether to renew, renew with modifications, or not renew the permit and if renewed, which management actions, mitigation measures, and monitoring requirements will be prescribed for the Limestone allotment to ensure management objectives and Arizona Standards for Rangeland Health are achieved.

2.0 Scoping and Identification of Issues:

Identification of issues for this assessment was accomplished by considering the resources that could be affected by the lease renewal. These issues were identified by the interdisciplinary team, leasee(s), and interested publics during scoping meetings and field visits. The issues identified through those meetings and field visits were:

1. What are the grazing effects on Category 2 desert tortoise habitat?
2. How are the existing access and transportation routes used by the grazing operation? How are they maintained?
3. What are the existing or potential impacts of range improvements on potential wilderness characteristics?
4. What are the upland vegetation impacts from livestock?
5. What are the impacts of grazing on cultural resources?
6. What are the impacts of grazing on wildlife?

3.0 DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION

3.1 Alternative 1 - Proposed Action to Renew Grazing Lease

The Proposed Action consists of the renewal of the grazing lease for the Limestone allotment for a period of 10 years with the following Terms and Conditions:

- 1) For a term of 10 years for a preference of 557 AUMs (No suspended AUMs)
- 2) Standard conditions (Attachment A).
- 3) If in connection with allotment operations under this authorization, any human remains, funerary objects, sacred objects or objects of cultural patrimony as defined in the Native American Graves Protection and Repatriation Act (P.L. 101-601; 104 Stat. 3048; 25 U.S.C. 3001) are discovered, the lessee/permittee shall stop operations in the immediate area of the discovery, protect the remains and objects, and immediately notify the Authorized Officer of the discovery. The lessee/permittee shall continue to protect the immediate area of the discovery until notified by the Authorized Officer that operations may resume.

Grazing Plan: Yearlong

Allotment Number	Allotment Name	Pasture	Number of Livestock	Kind	Begin	End	% Public Land	Type of Use	AUMs
06244	Limestone	Upland	54	CATTLE	3/1	2/28 (year-long)	92	ACTIVE	596

Table 1

Cultural Resource Best Management Practices:

- Standard Cultural Resource Stipulation Applicable to All Grazing Lease/Permit Renewals:

Should any archaeological or vertebrate fossils be discovered during implementation of the project, all surface disturbing activities in the area of discovery shall cease. The field office archaeologist will evaluate the discovery and provide recommendations to the Authorized Officer. Surface disturbing activities shall not resume until permission is obtained from the Authorized Officer.

Wildlife Best Management Practices:

In the proposed action, the following objectives and management actions from the Rangeland Plan for the Desert Tortoise and conservation measures from the Gila District Grazing Biological Opinion will be applied through monitoring for Arizona Standards for Rangeland Health and Guidelines for Grazing Administration.

Tortoise

- **Objective 10.** Ensure that livestock use is consistent with the Category Goals, Objectives, and Management Actions of this Range wide Plan. This may include limiting, precluding, or deferring livestock use as documented in site-specific plans.
- **Management Action 10A.** In every grazing allotment which includes tortoise habitat, manage livestock to allow adequate and suitable native forage, space, and cover to be available to tortoises throughout the year.
- **Action 10B.** Where site potential permits, manage livestock grazing to increase native perennial grasses, forbs, and shrubs that are required by tortoises.
- **Management Action 10C.** Allow utilization of tortoise forage and cover plants by livestock only to levels which allow for long-term plant vigor and adequate standing vegetation for late summer-fall tortoise use.
- **Management Action 10D.** Allow only those new range improvements for livestock in Category I and II Habitat Areas which will not create conflicts with tortoise populations. Mitigation for such conflicts is permissible to make the net effect of the improvements positive or neutral to desert tortoise populations. Conflicting existing improvements should be eliminated as opportunities arise.

Adaptive Management Practices:

Lessees are sent a letter requesting their proposed stocking levels for the coming billing year annually. They also can request a change in their authorization at any time such as to reduce their numbers due to drought or other factors. All grazing authorizations and changes to them must be approved by the Field Office manager. In drought years, BLM sends reminders to the

lessee's about reducing their herds, and if the drought is extended, BLM can require removal of livestock to protect the rangeland health of the allotment.

Actual use information will be submitted within 15 days of the end of the grazing year in accordance with 43 CFR 4130.3-2(d). Actual use reports will identify the amount of livestock use and period of use for each water source/pasture.

Administrative Actions

Range improvement cooperative agreements need to be made for each improvement under this lease. This ensures the proper maintenance and ownership of these developments.

Any new drinking troughs would be installed with escape ramps that intercept the line of travel along the tank edge (Sherrets 1989). The requirement for wildlife escape ramps will be added as a stipulation in the permit renewal.

The BLM in consultation, coordination and cooperation with the lessee, other agencies, and interested publics will continue to implement the following monitoring plan to measure the attainment of resource management objectives:

Desired resource conditions on the uplands: Maintain cover and composition of key forage species as described in the evaluation.

Monitor Key area cover, frequency, and composition. (Interagency Technical Reference, TR1730-002 1999. Sampling Vegetation Attributes,).

Rationale: It is expected that the proposed level of use would allow for maintenance and recruitment of key forage species; however if monitoring indicates that composition, cover, or frequency of these species is decreasing then use limits, and or the season of use would be adjusted.

Actual Use/Utilization data would be collected over a period of years along with trend data to determine if changes in management practices are necessary to meet resource condition objectives.

3.2 Alternative 2 - No Grazing:

Eliminate livestock grazing from the Limestone allotment.

Cancel the lease for grazing public lands within the Limestone allotment. Livestock grazing would not be authorized. BLM would initiate the process in accordance with 43 CFR parts 4100 and amend the RMP.

3.3 Alternative 3- Limit period of use:

Change period of use from yearlong to six months in the winter.

Period of use would be changed from 596 AUM's yearlong to 596 AUM's in the winter months from September 1- March 1. Lease terms and conditions, wildlife best management practices, adaptive management practices, and administrative actions would all apply to this alternative (refer to proposed action).

3.4 Alternative 4– No Action:

The no action alternative for livestock grazing permit renewals is defined as “continuing to graze under current terms and conditions” by IM-2000–022, Change 1 (reauthorized by IM-2010–063). The No Action Alternative for the Limestone Allotment would be the continued authorization of 596 AUMs yearlong. An additional 123 AUMs would continue to be in suspension as a result of a 1981 decision. Lease terms and conditions, wildlife best management practices, adaptive management practices, and administrative actions would all apply to this alternative (refer to proposed action).

3.5 Alternatives Considered but Eliminated From Detailed Analysis:

Increase the Stocking rate on the allotment.

Rationale for elimination:

Increase in the stocking rate on this allotment would not be justifiable. The terrain and vegetation and lack of reliable water sources for the livestock would not allow for an increase in use. An increase in AUMs would exceed carrying capacity and have negative effects on the vegetation resources and soils.

4.0 Conformance

4.1 Relationships to Statutes, Regulations, or Other Plans

The rangeland management program is managed under the provisions of the Taylor Grazing Act of 1934 as amended, the Federal Land Policy and Management Act of 1976 as amended, the Public Rangelands Improvement Act of 1978, and the National Environmental Policy Act (NEPA) of 1969. These laws along with the grazing regulations under 43 CFR 4100 and associated BLM Manual policy authorize and govern administration of livestock grazing on public lands.

The proposed action is subject to the Safford District Resource Management Plan (RMP), approved January 1992. This proposed action has been reviewed to determine if it conforms with the land use plan decisions as required by 43 CFR 1610.5, BLM MS 1617.3.

In addition, the Eastern Arizona Grazing Environmental Impact Statement was completed in 1987. Management of rangeland resources is guided by the Range Program Summary-Record of Decision (RPS/ROD) which selected the Preferred Alternative analyzed in the 1987 Eastern Arizona Grazing FEIS. The grazing decisions are incorporated by reference into the Safford District RMP (Safford District RMP page 12).

The Grazing RPS/ROD complies with requirements of the National Environmental Policy Act of 1969 and FLPMA and covers all land within the RMP area. This RPS/ROD provides guidance for the RMP area's grazing management program with the following objectives: 1) to restore and improve rangeland condition and productivity, 2) to provide for use and development of rangeland, 3) to maintain and improve habitat and viable wildlife populations, 4) to control future management actions and 5) to promote sustained yield and multiple use."

5.0 Affected Environment and Environmental Impacts

This section describes the baseline condition (i.e., affected environment) and expected impacts of the project alternatives. Appendix 1 summarizes the resources reviewed for this project. Resources that have been identified by the BLM Tucson Field Office interdisciplinary NEPA team as present and potentially affected are discussed further below. Those resources that are not affected (as identified by the BLM interdisciplinary team), and will not be discussed in detail include: Air Quality, Areas of Critical Environmental Concern, Environmental Justice, Prime and Unique Farmland, Floodplains, Native American Religious Concerns, Hazardous or Solid Waste, Water Quality - Drinking or Ground, Wetlands/ Riparian Zones, Wild and Scenic Rivers, Wilderness Areas, Invasive and Non Native Weeds, National Energy Policy, Recreation, Lands/ Realty, Mineral Resources, and Water Rights.

5.1 Vegetation

5.1.1 Affected Environment

The Limestone allotment is located in the middle elevation of the Sonoran Basin and Range province in southeastern Arizona. The potential plant community is a diverse community of desert trees, shrubs, cacti, and perennial forbs and grasses. With continuous heavy grazing, herbaceous and suffrutescent forage species are replaced by increases in shrubs, cacti and trees. Well-developed gravel covers help protect the soil from erosion. This site has a cycle of dominance by saguaro, alternating with large shrubs and trees that act as nurse plants for the giant cacti. This cycle takes approximately 300 years and starts from exceptionally wet years (El Nino) where saguaro establishes in large numbers. Trees present in the current allotment plant community *Canotia*, (*Canotia holacantha*), Ironwood (*Olneya spp.*), foothill Palo Verde (*Parkinsonia microphylla*), and velvet mesquite (*Prosopis velutina*). Shrubs include whitethorn acacia (*Acacia constricta*), ocotillo (*Fouquieria splendens*), creosote bush (*Larrea tridentate var. tridentate*) with the dominant half shrubs being triangle bursage (*Ambrosia deltoidea*), white bursage (*Ambrosia dumosa*), white brittlebush (*Encelia farinosa*), rayless brittlebush (*Encelia frutescens*), threadleaf snakeweed (*Gutierrezia microcephala*).

Native perennial grasses include black grama (*Bouteloua eriopoda*), bush muhly (*Muhlenbergia porter*), purple threeawn (*Aristida purpurea*), blue threeawn (*Aristida purpurea var. nealleyi*), red grama (*Bouteloua trifida*), fluffgrass (*Dasyochloa pulchella*).

The Natural Resource Conservation Service (NRCS) characterizes land resource regions by particular patterns of soils, climate, water resources and land uses. These large regions are then grouped into Major Land Resource Areas (MLRAs). MLRAs are then broken down further into ecological sites, which are associated units of soil and vegetation with quantifiable characteristics. The BLM portion of the Limestone Allotment is located in MLRA 40-1. Ecological Sites within this MLRA are; Limey Upland, Clay Loam Upland and Limey Slopes, all in the 10-13" precipitation zone ecological sites. These Ecological Sites range from 1,900 to 3,400 feet in elevation. Ecological Site Guides were last updated in 4-3-2008 for these sites.

The plant communities found on an ecological site are naturally variable. Existing communities are the result of the combination of historical and recent uses and natural events. Composition and production will vary with yearly conditions, location, aspect, and natural variability of the soils. The Historical Climax Plant Community represents the natural potential plant communities found on relatively undisturbed sites.

The potential plant community on all three ecological sites is an open stand of desert trees with an understory of low shrubs, cacti and perennial grasses and forbs. The aspect is shrubby.

With continuous, heavy grazing, perennial grass species are removed from the plant community and shrubs like triangle bursage and snakeweed can increase to dominate the understory. Mesquite tends to be shrubby on this site due to the thin surfaces over clayey horizons. Palo Verde and ironwood reach moderate size on the site. With thin soil surfaces this site can be a very ineffective user of intense summer rainfall if the herbaceous cover has been depleted. A 5 to 10% tree canopy is important on the site to keep diversity in the plant community. The potential of the site to produce grass is reduced as tree cover exceeds these amounts. Triangle bursage understories are long lived, persistent, and will not easily be replaced by perennial grass, as will snakeweed or burroweed understories with good grazing management. In severe drought the cover of perennial grasses and herbs as well as bursage and burroweed can be greatly reduced in the plant community. Recovery can result in return of perennial grasses and herbs if good summer rains follow drought. Recovery can result in return of the half shrubs if good cool season rains follow the drought. Prickly pear can increase under heavy grazing pressure. Jumping cholla can increase due to poor grazing management or such increases can be episodic due to climate. Cholla stand lifespans range from 50-70 years without reproduction.

Rangeland Health Evaluations were completed on three ecological sites on the allotment on March 6, 2013. The evaluations' preponderance of evidence indicated that there was a "none to slight" rating for departure from the ecological site description and ecological reference area for soil/site stability and hydrologic functions. Rills, water-flow patterns, pedestals and/or terracettes, bare ground, gullies, and litter movement were "none to slight" for departure from expected reference conditions. Rocky outcroppings and ground cover contributed to the absence of rills, gullies, and water-flow patterns. Plant community composition and distribution relative to infiltration was also "slight to moderate" for departure from expected reference conditions. Biotic integrity was rated "moderate to slight to moderate" for the three evaluations, because of the loss of plants and production on all sites due to drought conditions on the allotment.

Land Health standards are currently being met for the allotment with its current level of use of 596 AUM's. The complete Rangeland Health Evaluation for the Limestone allotment is available from the Tucson Field Office. The renewal of this 10 year lease will continue the current levels of livestock use.

Limey Slopes 3/6/2013

Rangeland Health Attribute	Departure From Ecological Site Description				
	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
Soil/Site Stability			1	2	7
Hydrologic Function			2	4	5
Biotic Integrity			2	2	3

Clay Loam Upland 3/6/2013

Rangeland Health Attribute	Departure From Ecological Site Description				
	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
Soil/Site Stability				3	7
Hydrologic Function				5	5
Biotic Integrity			4	4	1

Limey Upland 3/6/2013

Rangeland Health Attribute	Departure From Ecological Site Description				
	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
Soil/Site Stability				2	8
Hydrologic Function				3	7
Biotic Integrity			1	3	5

5.1.2 Environmental Impacts

Alternative 1 - Proposed Action

The proposed renewal of the grazing lease with Terms and Conditions allows the grazing program to continue on the Limestone Allotment in concert with the multiple use and sustainability mandates of the BLM. Elimination of the suspended use and only authorizing livestock to a level of acceptable utilization limits would allow upland vegetation to grow, set seed, build up carbohydrate stores, build root systems, become established, and spread unrestricted when weather conditions permit.

Alternative 2 – No Grazing

Elimination of grazing would allow upland vegetation to grow, set seed, build up carbohydrate stores, build root systems, become established, and spread unrestricted when weather conditions permit. New fences along BLM boundaries to keep out trespassing livestock would require some pruning and removal of vegetation.

Alternative 3 – Limit period of use

Limited period of use may allow a decrease in livestock utilization and a subsequent change in vegetative cover, structure, and/or species. The current utilization levels would likely be even lower with a reduction in the stocking rate, and would provide a sustainable forage base for livestock grazing consistent with other multiple uses. Additional monitoring of vegetation attributes would be required to assess a reduction in the stocking rate.

Alternative 4- No Action

The continuation of the existing terms and conditions under the current lease would have the same affects as the proposed action. The suspended AUM's will still be suspended.

5.2 Wildlife

5.2.1 Affected Environment

Common wildlife species found in the area include mule deer, javelina, coyote, gray fox, skunk, cottontail rabbit, small rodents, reptiles and amphibians, Gambel's quail, mourning dove, and songbirds. Bird Species of Conservation Concern for the area are Brewer's sparrow (wintering species), loggerhead shrike, golden eagle, peregrine falcon, Swainson's hawk, and cactus wren. The ecological site description states that the site provides excellent habitat for deer and javelina, with natural water areas occurring infrequently as springs or seeps (Tub Spring, Seep Spring and the San Bernardo mine water are known to be present on the allotment). In addition, deer pellet groups were observed at the evaluation site on 3/6/2013, as well as soil disturbance from rooting javelina. The allotment contains both category 2 and 3 desert tortoise habitat as designated by the BLM. A biological evaluation for threatened, endangered and candidate species is attached (Attachment B).

5.2.2 Environmental Impacts

Alternative 1 - Proposed Action

Livestock grazing may impact wildlife through competition for water, food, and/or cover. Increased predation through lack of cover may also occur. Cattle may compete directly with browsers, such as mule deer, especially in the spring when new growth is limited. Despite common misperceptions, evidence suggests that wildlife–livestock competition does not lead to competitive exclusion and may have a smaller impact on wildlife and livestock populations than factors external to the wildlife–livestock interaction. Other factors such as drought, habitat/pasture loss due to agriculture, disease, and hunting/predation are likely to more significantly influence the viability of wildlife and livestock populations (Homewood et al. 2001). Heavier use on grass species near water developments and areas of terrain favorable to cattle movement may cause an increase in the proportion of forbs as these annuals invade the site. These forbs may be preferred by deer; however, mule deer may shift their habitat use in response to livestock grazing (Loft et al. 1991), and may decline when cattle are introduced (Wallace and Krausman 1987).

Bird and rodent species which forage on grass seeds as a large component of their diet may experience negative impacts if livestock grazing does not allow for enough plants to complete their life cycle and produce seed. Changes in vertical structure of vegetation can impact ground nesting birds, rodents, and reptile species by reducing cover needed for protection from weather and predators. Deer may be affected through a decrease in recruitment by loss of vertical structure within fawning areas. A reduction in cover may favor predator species that hunt by sight, and potentially improve their hunting success.

Fencing within an allotment may impact ungulate movement and even cause direct mortality. Fences, if not built to BLM specifications for wildlife compatible fencing, may promote habitat fragmentation and lead to the loss or decreased use of habitat. Fences have also been known to cause direct mortality to ungulates (Harrington and Conover 2006) and flying birds, particularly raptors (Gillihan 2000). There are only two pastures on the allotment, separated by a state highway and private lands. Fencing on the highway right of way is the responsibility of the AZ Department of Transportation which utilizes wildlife-friendly standards. A stipulation will be added for range improvements that all new fencing and modifications to existing fences will be built to BLM specifications for wildlife-friendly fencing.

Livestock grazing may provide an additional food source for large predators, such as mountain lions. The ability to utilize livestock may maintain predator numbers when natural factors, such as drought and natural prey populations, may have led to predator declines, especially since predator control is not used on this allotment. Suppression of large predators for livestock protection may lead to an increase in smaller predators, which may have been reduced by direct competition and predation from larger predators (Cunningham et al 1999).

Wildlife populations may also be impacted from livestock grazing activities through human disturbance associated with access and management of range improvements (e.g. fencing) on the allotment. Vehicle access may fragment habitat, and result in accelerated rates of erosion and loss of vegetative resources. Ungulates may utilize those areas where provided water exists at the 3 spring developments under a livestock grazing program. This utilization may impact the vegetative community as plant species, richness, abundance, and availability changes with grazing pressure. Smaller species, such as birds and bats, may also benefit from increased availability of water and from an increase in insects associated with the water.

Potential effects of livestock grazing in desert scrub habitat received significant treatment in the literature, with varied scientific conclusions. Studies have shown that livestock grazing may result in varying effects on plant species richness, composition, and density of the Sonoran desert tortoise forage base. Effects to desert scrub habitat are commensurate with livestock use of these areas and decrease with increasing distance from these sources (Avery and Neibergs 1997, p. 19; Boarman 2002, p. 34). The density of certain nonnative plant species, such as *Schismus* spp., has also been positively correlated to distance to watering sites, while others, such as red brome, are negatively correlated (Brooks et al. 2006, p. 139). Native plant species cover and richness has been shown to decrease with increasing proximity to livestock waters (Brooks et al. 2006, pp. 140–141). Juvenile and adult Sonoran desert tortoises were frequently observed by Meyer

(1993, pp. 101–102) using salt licks provided for livestock. Frequenting salt licks may benefit desert tortoises (especially hatchlings and small juveniles), but likely increases risk of being trampled by livestock because the salt licks can attract higher concentrations of both livestock and tortoises in actively grazed pastures. Based on the results of a study conducted by Balph and Malecheck (1985, p. 227), cattle avoid stepping on uneven surfaces. Desert tortoises will likely be perceived as an uneven ground surface; therefore, cattle may intentionally avoid stepping on them. We observed several instances in the literature that discussed an inherent partitioning of land used by livestock and that used by Sonoran desert tortoises. Livestock often take the paths of least resistance and are unlikely to venture great distances from water. These behavioral traits of domestic livestock limit, to some degree, the potential effects from livestock grazing in Sonoran desert habitat, as livestock are less likely to travel into rough, steep terrain, instead favoring valley bottoms and water sources (AIDTT 2000, pp. 9, 21). Effects from livestock grazing are expected to be attenuated due to the relatively steep slopes and rugged terrain often preferred by Sonoran desert tortoises, but quantitative studies have not been conducted to confirm this assumption (AIDTT 2000, p. 9; Oftedal 2007, p. 26). Because of the generalized differences in habitat usage by livestock (flats, ridge tops, and drainage bottoms) and Sonoran desert tortoises (steep slopes and rocky bajadas), ecological and dietary overlap is uncommon, but does occur to some degree (AGFD 2010, p. 6). Where such overlap is significant, in particular in periods of drought, the effect of livestock use on Sonoran desert tortoise habitat may be considerable (AGFD 2010, p. 7). Sonoran desert tortoises may also selectively avoid grazed areas. While Sonoran desert tortoises are generally known to use steep rocky slopes and bajadas as their primary habitat areas, they occasionally occur in more flat terrain, such as the Florence Military Reservation, where they are 35 percent less likely to use habitat where livestock grazing occurs (AGFD 2010, p. 7).

Meyer et al. (2010, p. 42) surmised that “tortoise densities were affected by soil, topography and vegetation and had little or no relationship to livestock grazing or grazing systems.”

Wildlife mitigation will be applied through the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration and pertinent objectives and conservation measures are listed in attachment B of the S&G evaluation for the Limestone Allotment.

The U.S. Fish and Wildlife Service in their 12 –month finding on the petition to list the Sonoran Desert Tortoise stated; “In consideration of the literature presented above, we conclude that grazing effects to the Sonoran desert tortoise may occur but are likely limited in severity and scope in Arizona, because habitat shared by livestock and Sonoran desert tortoises is not a significant proportion in most areas in Arizona, and because livestock grazing in Arizona is actively managed by land management agencies.”

Alternative 2 – No Grazing

The no grazing alternative would create less competition between wildlife and livestock for water, food, and cover for the BLM lands within the allotment. Decreased plant utilization by livestock may result in more or different available plant food sources, a change in prey species, richness, relative abundance, or availability, and/or improved cover for wildlife. However, increased utilization and decreased cover may occur on the state and private land of the allotment once BLM land became fenced out (outside of BLM's authority).

Alternative 3 – Limit period of use

Limiting period of use may allow less competition between wildlife and livestock for water, as more available water would be present for wildlife. A condition of the lease would be that waters be kept available for use by wildlife during periods that livestock are not on the allotment. Improved vegetative cover with decreased utilization by livestock over the whole of the allotment may result in increased effectiveness of movement and concealment, and changes in species, richness, relative abundance, or availability of prey for wildlife.

Alternative 4- No Action

The continuation of the existing terms and conditions under the current lease would have the same affects as the proposed action. The suspended AUM's will still be suspended.

5.3 Access/Transportation

5.3.1 Affected Environment

A physical access route inventory was completed for public lands and State Trust lands in the area in an interagency route inventory 2003. The route inventory identified an ingress/egress point from SR77 into public lands in the Limestone allotment. Ingress/egress points into the allotment were also identified from the Dripping Springs allotment adjacent to the west and the Christmas allotment to the east. Motorized routes were identified within the allotment, as well as several routes that provided access in the past, but are not reclaiming from lack of use. A route evaluation was completed for this area, and potential route designations were identified, but no transportation plan decisions have been made. The condition of all roads is poor, with washouts, drainage problems, excessively steep grades, and severe drainage and erosion problems throughout. Some routes enter public lands from adjacent private land.

5.3.2 Environmental Impacts

Alternative 1- Proposed Action

Existing inventory access routes would be used in connection with the use, maintenance and operation of the livestock grazing lease. The routes would continue to receive light use for administrative purposes and public recreational use. Traffic volume would continue to be low. Some existing routes may require repair or maintenance in order to safely accommodate vehicle access; no maintenance work is proposed, and would require specific authorization when the work is planned under a separate action.

Alternative 2- No Grazing

Existing inventory access routes would no longer receive traffic related to grazing use, maintenance or operation activities. The routes would continue to receive light use for administrative purposes and public recreational use.

Alternative 3- Limit Period of use

Similar to impacts under the Proposed Action although the lessee would be utilizing the access routes less in the summer when the livestock are removed.

Alternative 4- No Action

The continuation of the existing terms and conditions under the current lease would have the same affects as the proposed action.

5.4 Visual Resources

5.4.1 Affected Environment

Portions of the allotment within a mile are visible in the foreground from SR77, a scenic route. Views from within the allotment are scenic and panoramic, overlooking the Dripping Springs valley and the Dripping Springs mountain range to the west. Public lands within ½ mile of the highway are under an interim Visual Resource Management (VRM) Class II; other lands are under an interim VRM Class III objective

5.4.2 Environmental Impacts

Alternative 1- Proposed Action

No new impacts on visual resources. Visual impacts of existing fence lines, travel routes and other landscape modifications or structures related to grazing present low visual contrast levels in the views from SR77 and interior local routes.

Alternative 2- No Grazing

No new impacts on visual resources. Existing range improvements do not have a noticeable visual contrast in the overall landscape and will be left in place as most of them are allotment boundary or highway right-of-way fencing.

Alternative 3- Limit Period of use

Similar to those under the Proposed Action because all range improvements will remain in place.

Alternative 4- No Action

The continuation of the existing terms and conditions under the current lease would have the same affects as the proposed action.

5.5 Cultural Resources

5.5.1 Affected Environment

Issuance of the lease constitutes a Federal Undertaking under Section 106 of the National Historic Preservation Act (NHPA). The Area of Potential Effect (APE) has been determined to be the public lands within the grazing allotment.

Compliance with Section 106 of the national Historic preservation Act on all grazing permit/lease renewals will be carried out consistent with the BLM AZ Cultural Resource programmatic Memorandum of Agreement between the AZ BLM and the AZ State Historic Preservation office (SHPO). In compliance with 36 CFR 800.4 (a)(1)(i) and the AZ BLM's *Guidelines for Cultural Resource Compliance on Grazing permit and lease Renewals* (Appendix 12 of BLM Handbook H8120). The list below outlines actions that have been taken to identify cultural resources located in the APE, evaluate the eligibility of cultural resources for listing in the National Register of Historic Places (NRHP), determine the effect of the undertaking on eligible cultural resources, and design mitigation measures or alternatives where appropriate.

1. A Class I Literature Search as described in BLM Manual Section 8110.21A2 will be completed for each allotment on which a permit or lease is being considered for renewal
2. Information obtained in the Class I literature search will be compared with livestock grazing information for each allotment to determine whether it is likely that impacts to cultural resources are occurring
3. If there are no known cultural resources/sites in areas that are being heavily impacted by livestock, and the field office archaeologist determines that the areas hold minimal potential for the presence of cultural resources, than no further inventory work is needed
4. When historic properties are identified as being impacted by livestock grazing, the characteristics that make these properties eligible for the National Register of Historic Places are being compromised, mitigation measures will be outlined in the NEPA document for the allotments involved.
5. Grazing permits and leases will include specific mitigation measures or management actions designed to avoid adverse effects to cultural resources, as terms and conditions of the renewed permit.

Allotment case files, AMP files, range project files, and water source inventory files, were reviewed to determine areas of livestock congregation. Cultural resource site records/files were also reviewed to determine if archaeological sites were previously recorded in and around areas of livestock congregation. After review, it was determined that no historic properties were identified in areas of livestock congregation, therefore no mitigation is recommended as a BLM responsibility or as a term of condition of the permit, to protect cultural resource values identified above.

Standard Cultural Resource Stipulation Applicable to All Grazing Lease/Permit Renewals:

Should any archaeological or vertebrate fossils be discovered during implementation of the project, all surface disturbing activities in the area of discovery shall cease. The field office archaeologist will evaluate the discovery and provide recommendations to the Authorized Officer. Surface disturbing activities shall not resume until permission is obtained from the Authorized Officer.

As required by the Native American Graves Protection and Repatriation Act regulations at 43 CFR 10.4(g), the following should be added to the grazing lease/lease as a term and condition:

If in connection with allotment operations under this authorization, any human remains, funerary objects, sacred objects or objects of cultural patrimony as defined in the Native American Graves Protection and Repatriation Act (P.L. 101-601; 104 Stat. 3048; 25 U.S.C. 3001) are discovered, the leasee shall stop operations in the immediate area of the discovery, protect the remains and objects, and immediately notify the Authorized Officer of the discovery. The leasee shall continue to protect the immediate area of the discovery until notified by the Authorized Officer that operations may resume.

* Properties refer to archaeological sites and/or Traditional Cultural Properties (TCP's)

5.5.2 Environmental Impacts

Alternative 1 - Proposed Action

The continuation of existing terms and conditions under the current lease would likely have few or limited impacts to cultural resources if guidelines for cultural resource compliance (referenced in "Cultural Resource Handbook 8120 for Grazing/Lease Renewals") are followed. Impacts can occur to cultural resource properties from livestock grazing especially in areas where water developments occur. For this allotment, no cultural resource modifications have been recommended under the proposed action. Any subsequent NEPA related project activities such as construction of range improvements will require a Class III (Section 106 NHPA) cultural resource survey prior to project implementation. When historic properties are identified as being impacted by livestock grazing, if the characteristics that make these properties eligible for the NRHP are being compromised, mitigation measures will be outlined in the NEPA document for the allotment involved.

Alternative 2 - No Grazing

Livestock grazing would not be continued so would not impact cultural resources.

Alternative 3- Limit period of use

See Above Impacts Same as Alternative 1- Proposed Action

Alternative 4- No Action

The continuation of the existing terms and conditions under the current lease (no cultural resource modifications have been made to the proposed action to renew the grazing lease), would likely be expected to remain as they are; highest risk areas to cultural resources are around

livestock waters, and the three water sources (springs/seeps). If cultural resource sites are being impacted, mitigation measures will be outlined in the NEPA document for the allotment involved.

5.6 Grazing Program

5.6.1 Affected Environment

The Limestone Allotment is authorized for 54 cattle year-long (596 AUMs) with 123 suspended AUM's. There are two large pastures within the allotment that are intertwined with land status owners. Public lands cannot be managed separately from these other land owners without a large amount of new fencing construction. There is no Coordinated Resource Management Plan written for the allotment.

The Selective Management Category process was initiated in 1982 and was intended to focus staff and fiscal resources on priority allotments. The Selective Management categories Improve (I), Maintain (M), Custodial (C) were used to classify allotments based on resource conditions and opportunities for range improvement investment. In addition, the selective management process was also used for prioritization of monitoring field work. First priority was given to I allotments, second priority for M allotments and third priority for C allotments. In 2009, this policy was updated to ensure land health considerations are the primary basis for prioritizing the processing of grazing permits and leases and for the monitoring the effectiveness of grazing management.

Maintain Grazing Management- The management category given to the allotment is Maintain (M). By definition, M category allotments do not have serious resource conflicts and range condition and present management is satisfactory.

1. Present range condition is satisfactory.
2. Allotments have moderate or high resource production potential and are producing near their potential (or trend is moving in that direction).
3. No serious resource-use conflict/controversy exists.
4. Opportunities may exist for positive economic return from public investments.
5. Present management appears satisfactory.

Livestock water is provided from two wells, one on the private property and one on the State leased land. There are four spring developments on the allotment where water is piped a short distance into a trough at each.

5.6.2 Environmental Impacts

Alternative 1 - Proposed Action

The management category given to the Limestone allotment is maintain (M). By definition, M category allotments have no serious resource conflicts and range condition and present management is satisfactory. Under this management BLM management actions are limited to licensing livestock use based on the AUMs available on the public lands, and the individual ranch operator determines the grazing system (if any) to be used. BLM checks these grazing units to insure that the utilization on public lands is not excessive, that range condition and trend are being maintained, and that applicable regulations are being followed. If utilization is found to be excessive or the range trend to be down, BLM will work with the operator to adjust livestock numbers on the total grazing unit.

The leasee would be allowed to utilize the allotment. Leasee would use the allotment for the pasturing of 596 AUM's. Along with this new 10 year lease a cooperative agreement with the lease will be written to properly show responsibilities to each party involved for the maintenance of range improvement projects.

Alternative 2 – No Grazing

No grazing would be authorized on public land. BLM would initiate the process to cancel the allotment in accordance with 43 CFR parts 4100 and would need to amend the RMP. With no grazing this allotment would be expected to evolve according to the natural processes of the environment. The 910 acres of State Trust land may no longer be viable as a grazing lease, either depriving the Trusts of possible revenues in violation of the Arizona State constitution or creating a source of perpetual grazing trespass on the BLM lands

Alternative 3 – Limit period of use

Period of use would be changed from 596 AUM's yearlong to 596 AUM's in the winter months from September 1- March 1. The allotment contains predominantly summer growing vegetation. With a change of use to the winter season vegetation would have the summer season to grow, build carbohydrate reserves, and go to seed before any grazing took place.

Alternative 4- No Action

The continuation of the existing terms and conditions under the current lease would have the same affects as the proposed action, but they would still have the suspended AUM's on their lease.

5.7 Wilderness Characteristics

5.7.1 Affected Environment

During scoping for the proposed development of a Tucson Resource Management Plan (currently Safford District RMP provides management guidance for this area), the BLM received a proposal from the Sky Island Alliance in 2006 for an area believed to have wilderness characteristics, including portion of the Limestone allotment as shown on Map 11.1.2. The

citizen's wilderness characteristics inventory area includes two old routes that were clearly constructed by equipment. However, maintenance on these routes has been limited to the passage of vehicles, and occasional trimming of encroaching vegetation. The portion of the allotment within the citizen's inventory unit appears to be largely natural due to the absence of developments, is roadless, and is approximately 5,700 acres in size. A BLM wilderness characteristics review and inventory was completed (AZ-4-1B) with the public lands within T. 3 S, R. 16 E, being proposed as a WSA. The area was released from being a WSA under the Arizona Desert Wilderness Act of 1990 (P.L. 101-628), Therefore it may have wilderness characteristics.

5.7.2 Environmental Impacts

Alternative 1 - Proposed Action

Any range improvements that were developed in the upper (Northern) portion of the allotment could alter wilderness characteristics (particularly the naturalness, roadlessness of the area). However, no range improvements are currently proposed.

Alternative 2 - No Grazing

Impacts would be similar to those under the proposed action, except that there is no potential for impacts from range improvements under this alternative.

Alternative 3- Limit period of use

Similar impacts to those under the proposed action.

Alternative 4 – No Action

Similar impacts to those under the proposed action.

6.0 CUMULATIVE IMPACTS FROM THE PROPOSED ACTION AND OTHER ALTERNATIVES

Current conditions in the project area result from a multitude of natural events and human actions that have taken place over many decades. Cumulative effects are defined as the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions" (40 CFR 1508.7).

Geographic Scope: See Map.

Upland vegetation: The Geographic scope is the upland vegetation on the Limestone allotment. This area was chosen because it represents the potential impact area of the proposed action. Any impacts that occur downstream of the allotment would be confined to the xeroriparian habitat which is analyzed under the upland section.

Time Frame: The time frame for this analysis is the life of the lease (10 years). The impacts from the proposed action are anticipated to last for the life of the project after which impacts would be re-analyzed.

Past, Present and Reasonably Foreseeable Future Actions and Effects:

Upland vegetation: Past and present impacts to upland vegetation include: utilization of vegetation and changes in vegetative composition. Types of past and present actions on the allotment include: development of range improvements, building roads, developing utility rights of ways, mining operations.

Reasonably foreseeable future actions would likely include development of private land including road building and clearing vegetation for houses, utility lines, and roads.

Cumulative effects of the Proposed Action:

Upland vegetation: The Proposed action would utilize some upland vegetation associated with grazing. Adding the effects of the proposed action to the effects of the past, present and foreseeable future actions are not expected to change current conditions. This utilization of vegetation would not compromise wildlife habitat or plant community connectivity or result in the loss of any species or populations. Cumulatively these impacts aren't expected to result in the loss of habitat function in any of the vegetative communities.

Cumulative effects of the No Grazing Action:

Upland vegetation: No impacts to upland vegetation would occur. Therefore no Cumulative impacts analysis of upland vegetation is required.

7.0. CONSULTATION, COOPERATION, AND COORDINATION

In addition to personal consultation, cooperation, and coordination, NEPA Project Coordination Meetings are held twice a month at the Tucson Field Office.

8.0 PERSONS/AGENCIES CONSULTED:

This proposal was presented at the BLM/ bi-monthly NEPA project coordination meetings held on April 22, 2013. Persons expressing an interest in reviewing the proposal are listed on the TFO Scoping Form, and below.

9.0 LIST OF PREPARERES

Darrell Tersey, Bureau of Land Management, Natural Resource Specialist

Eric Baker, Bureau of Land Management, Rangeland Management Specialist
Francisco Mendoza, Bureau of Land Management, Outdoor Recreation Planner
Amy Sobiech, Bureau of Land Management, Archeologist
Keith Hughes, Bureau of Land Management, Natural Resource Specialist

10.0 REFERENCES

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11.0 APPENDICES

Attachment A

Limestone Allotment No. 4508 Grazing Lease - Terms and Conditions

This Grazing Lease is issued subject to the following conditions:

1. Any changes in grazing use must be applied for prior to the grazing period.
2. Each year billing notices are issued which specify, for the current year, the allotment(s), number and kind of livestock, period(s) of use, animal unit months of use, and the grazing fees due. These billing notices when paid, become a part of this grazing permit/lease.
3. Grazing fees are due upon issuance of a billing notice and must be paid in full prior to making any grazing use under this grazing permit/lease, unless otherwise provided for in the terms and conditions of this grazing permit/lease.
4. This grazing permit/lease is subject to the terms and conditions of an allotment management plan if such plan has been prepared. If an allotment management plan has not been prepared, it must be incorporated in this permit/lease when completed.
5. No grazing use can be authorized under this grazing permit/lease during any period of delinquency in the payment of amounts due in settlement for unauthorized grazing use.
6. Grazing use authorized under this grazing permit/lessee may be suspended, in whole or in part, for violation by the permittee/lessee of any of the provisions of the rules or regulations now or hereafter approved by the Secretary of the Interior.
7. This grazing permit/lease is subject to cancellation, in whole or in part, at any time because of:
 - a. Noncompliance by the permittee/lessee with rules and regulations now or hereafter approved by the Secretary of the Interior.
 - 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 herein.

- e. Repeated willful unauthorized grazing use.
8. This grazing permit/lease is subject to the provisions of executive Order NO. 11246 of September 24, 1965, as amended, which sets forth nondiscrimination clauses. A copy of this order may be obtained from the authorized officer.
 9. The permittee/lessee must own or control and be responsible for the management of the livestock authorized to graze under this grazing permit/lease.
 10. The authorized officer may require counting and/or additional or special marking or tagging of the livestock authorized to graze under this grazing permit/lease.
 11. The permittee's/lessee's grazing case file is available for public inspection as required by the Freedom of Information Act.
 12. Actual Use information, for each use area, will be submitted to the authorized officer within 15 days of completing grazing use as specified on the grazing lease and/or grazing billings in accordance with 43 CFR 4130.3-2(d).
 13. In order to improve livestock distribution on the public lands, all salt blocks and/or mineral supplements will not be placed within a 1/4 mile of any riparian area, wet meadow, or watering facility (either permanent or temporary) unless stipulated through a written agreement or decision in accordance with 43 CFR 4130.3-2(c).
 14. In Accordance with 43 CFR 4130.8-1(F): Failure to pay grazing bills within 15 days of the due date specified in the bill shall result in a late fee assessment of \$25.00 or 10 percent of the grazing bill, whichever is greater, but not to exceed \$250.00. Payment made later than 15 days after the due date, shall include the appropriate late fee assessment. Failure to make payment within 30 days may be a violation of 43 CFR Sec. 4140.1(b)(1) and shall result in action by the authorized officer under 43 CFR Secs. 4150.1 and 4160.1-2.
 15. Grazing in this allotment shall strictly adhere to the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration, the Safford Upland Livestock Utilization and Drought Policies.

Attachment B

Effects Determination Form
Threatened and Endangered Species
NEPA supplement for ESA compliance
Project Action Biological Evaluation
U.S. Department of the Interior
Bureau of Land Management
Tucson Field Office

Updated Form July 2000

A. Action Information related Biological Evaluations

Action Name: Limestone Allotment Grazing Lease Renewal

EA#: DOI-BLM-AZ-G020-2013-0025-EA

Basin: Gila County: Gila

Watershed: Dripping Springs Species List Obtained: Yes(EIS) No(EA)

Topographic Location (stream/mountain): Slopes and valley bottom_

Potential Species: Sonoran desert tortoise, grey wolf, ocelot

Affected Species: Sonoran desert tortoise, grey wolf, ocelot

Affected Critical Habitat: None

Contact Biologist/Botanist: Darrell Tersey

Project Contact: Darrell Tersey

Location Map (See EA)

Summary of Proposed Action (See EA)

Purpose and Need for Proposed Action (See EA)

B. Determination (include clear rationale which is supported by data)

1) Determination on Original Project Proposal:

No Effect

May Effect, Not Likely to Adversely Effect (request concurrence)

May Effect, Likely to Adversely Effect (consult)

Determination Rationale: (attached)

2) Determination on Project Proposal with Mitigation, Stipulations and/or Management Changes:

No Effect (get concurrence)

May Effect, Not Likely to Adversely Effect (consult w/ USFWS-concurrence)

May Effect, Likely to Adversely Effect (consult w/ USFWS)

Determination Rationale with Mitigation, Stipulations and/or Management Changes: (Attached: *May Effect, not Likely to Adversely Affect per Biological Opinion on the Gila District Livestock Grazing Program, May affect individuals but is not likely to cause a trend to Federal listing or loss of viability to Sonoran desert tortoise.*)

Signatures

Prepared By Darrell Tersey Title Natural Resource Specialist Date 03-17-2014

Biologist/Botanist

WILDLIFE RESOURCES

THREATENED AND ENDANGERED SPECIES

BLM has reviewed the U.S. Fish and Wildlife Service’s list of threatened and endangered species for Gila County (<http://arizonaes.fws.gov/>) and the following effect determinations are made.

<u>Common Name</u>	<u>Scientific Name</u>	<u>Listing Status</u>	Effect Determination
Apache (Arizona) trout	<i>Oncorhynchus gilae apache</i>	T	No Effect – Known locations and suitable habitat are greater than 10 miles away
Arizona hedgehog cactus	<i>Echinocereus triglochidiatus arizonicus</i>	E	No Effect – Known locations and suitable habitat are greater than 10 miles away
Chiricahua leopard frog	<i>Lithobates [Rana] chiricahuensis</i>	T	No Effect – Known locations and suitable habitat are greater than 10 miles away
Colorado pikeminnow	<i>Ptychocheilus lucius</i>	E	No Effect – Known locations and suitable habitat are greater than 10 miles away
Gila chub	<i>Gila intermedia</i>	E	No Effect – Known locations and suitable habitat are greater than 10 miles away
Gila topminnow	<i>Poeciliopsis occidentalis occidentalis</i>	E	No Effect – Known locations and suitable habitat are greater than 10 miles away
Lesser long-nosed bat	<i>Leptonycteris curasoae yerbabuena</i>	E	No Effect – Known locations and suitable habitat are greater than 40 miles away
Loach minnow	<i>Tiaroga cobitis</i>	T	No Effect— Known locations and suitable habitat are greater than 10 miles away

Mexican spotted owl	<i>Strix occidentalis lucida</i>	T	No Effect – Known locations and suitable habitat are greater than 10 miles away
Mexican gray wolf	<i>Canis lupus baileyi</i>	E	May Effect, not Likely to Adversely Affect per <i>Biological Opinion on the Gila District Livestock Grazing Program</i>
Ocelot	<i>Leopardus (=Felis) pardalis</i>	E	May Effect, not Likely to Adversely Affect per <i>Biological Opinion on the Gila District Livestock Grazing Program</i>
Razorback sucker	<i>Xyrauchen texanus</i>	E	No Effect— Known locations and suitable habitat are greater than 10 miles away
Spikedace	<i>Meda fulgida</i>	T	No Effect— Known locations and suitable habitat are greater than 10 miles away
Yuma clapper rail	<i>Rallus longirostris yumanensis</i>	E	No Effect— Known locations and suitable habitat are greater than 10 miles away
Desert tortoise, Sonoran population	<i>Gopherus morafkai</i>	C	May affect individuals but is not likely to cause a trend to Federal listing or loss of viability to Sonoran desert tortoise.
Headwater chub	<i>Gila nigra</i>	C	No Effect – Known locations and suitable habitat are greater than 10 miles away
Northern Mexican gartersnake	<i>Thamnophis eques megalops</i>	C	No Effect – Known locations and suitable habitat are greater than 10 miles away
Roundtail chub	<i>Gila robusta</i>	C	No Effect – Known locations and suitable habitat are greater than 10 miles away

Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C	No Effect – Known locations and suitable habitat are greater than 10 miles away
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E – Endangered

T – Threatened

PE – Proposed Endangered

C – Candidate

The occurrence of any listed or proposed species has not been documented. There is no designated critical habitat. However, potential habitat does occur on the Limestone allotment for lesser long-nosed bat (*Leptonycteris curasoae yerbabuena*). The allotment does contain agave and Saguaro at the lower elevations on south facing slopes and may provide habitat for foraging lesser long-nosed bat. There has been no construction or maintenance of structures or improvements on the allotment that could affect food plants.

BLM conservation measures in the grazing BO included the following for lesser long-nosed bat:

1. Livestock grazing will not disturb or modify roost sites in the action area.
2. Construction and maintenance of livestock management structures and implementation of rangeland improvements will avoid or minimize the damage or destruction of bat food plants within 40 miles of a roost site.
3. Within 40 miles of roost sites, livestock management guidelines and prescriptions will be implemented that facilitate the regeneration and maintenance of bat food plants, including implementing the appropriate drought management policies and managing to meet the standards and guidelines. This includes minimizing damage to bolting agaves, especially in low flowering years.

After reviewing the status of the lesser long-nosed bat, the environmental baseline for the action area, and the effects of the proposed action, FWS concurred that the proposed action may affect, but is not likely to adversely affect, the lesser long-nosed bat based upon the following:

1. The known roost sites are not expected to be disturbed or modified by the proposed livestock management because of inaccessibility or distance from actions. The BLM will make necessary management changes to protect any roosts found in the future that are in or near an allotment. Therefore, the effects to roosts are discountable.
2. Effects from the construction and maintenance of structures and improvements to forage plants will be minimal because the BLM will survey before the actions are implemented and minimize effects to forage plants. This will result in relatively few forage plants being affected, and will leave the majority of forage plants in the area unaffected. Therefore the effects are insignificant, and, as a result, will not limit the use of the area for bats.
3. Livestock management guidelines and prescriptions will be implemented that facilitate the regeneration and maintenance of bat food plants, including implementation of appropriate drought management policies and managing to meet the standards and guidelines. This includes minimizing damage to bolting agaves, especially in low flowering years, through changes in management, including implementing drought management guidelines and managing to meet the standards and guidelines. These actions may result in some individual plants and bolts being affected in some years, but most foraging plants and bolts will be unharmed, and therefore, the effects are insignificant. Foraging areas will continue to be used by bats.
4. No critical habitat has been designated for these species, so no critical habitat will be affected.

In 2009, an ocelot was documented in Arizona (in Cochise County) with the use of camera traps. Additionally, in 2010, an ocelot was found dead on a road near Globe, Arizona. In 2011, an ocelot was documented in the Huachuca Mountains. In addition to the recent Arizona sightings, a number of ocelots have been documented just south of the U.S. border in Sonora, Mexico. At least four ocelots have been documented since February 2007 in the Sierra Azul, 30-35 miles southeast of Nogales; and one ocelot was documented in 2009 in the Sierra de Los Ajos, about 30 miles south of the U.S. border near Naco, Mexico. The closest U.S. documented ocelot occurrence from the Limestone allotment is approximately 20 miles west of the allotment.

Recent U.S. ocelot locations are near the action area, especially since one ocelot was known to travel a significant distance (Globe, Arizona). BLM allotments that are scattered in southeastern Arizona may provide dense vegetation for the ocelot, especially for travel between mountain ranges. Some BLM lands may also provide habitat for foraging and hiding.

The effects to the ocelot are expected to occur by altering their travel and foraging cover, and prey availability, and inadvertently through predator control activities. However, no predator control activities are expected on the Limestone allotment or other allotments within TFO.

The proposed action is not anticipated to result in significant changes to habitat quality or quantity because the allotments will be managed to meet the standards and guidelines. This management will not result in clearing of habitat, destruction of riparian areas, or fragmentation. Any changes to prey habitat are likely to be localized, and livestock management is not expected to significantly change prey availability throughout the areas in which jaguars or ocelots may occur. These effects on ocelot foraging and travel cover, and on prey habitat, are expected to be small, not measurable, and insignificant.

After reviewing the status of the ocelot, the environmental baseline for the action area, and the effects of the proposed action, FWS concurred that the proposed action of grazing on BLM allotments may affect, but is not likely to adversely affect, the ocelot based upon the following:

1. The proposed action is not anticipated to result in significant changes to habitat quality or quantity because the allotments will be managed to meet the standards and guidelines, which will not result in clearing of habitat, destruction of riparian areas, or fragmentation.
2. Any changes to prey habitat are likely to be localized, and not expected to significantly change prey availability throughout the areas where jaguars or ocelots may occur.
3. The likelihood of a jaguar or ocelot occurring in the same area where predator control activities are occurring is small, and if such activities are authorized by the BLM, it shall require identification of the target animal to species before control activities are carried out. If the identified animal is a jaguar or ocelot, that individual shall not be subjected to any predator control actions.

In 1998, Mexican gray wolves were reintroduced to parts of Arizona and New Mexico under the authority of section 10(j) of the Endangered Species Act (63 FR 1752). This set forth management directions and limitations within a defined boundary known as the Mexican Wolf Experimental Population Area. Within the experimental boundary is a primary and secondary recovery zone known as the Blue Range Wolf Recovery Area. Because of their status as an experimental, non-essential population, wolves found in these recovery zones are treated as though they are proposed for listing for section 7 consultation purposes. By definition, an experimental non-essential population is not essential to the continued existence of the species. Therefore, no proposed action impacting a population so designated could lead to a jeopardy determination for the entire species. As of 2011, the minimum population estimate of wolves within the experimental population area was 58.

No wolves occur within the action area. If individual wolves disperse from the experimental population south or north into the action area, humans working near individuals could disturb the wolves, but they would only move to other areas. Livestock grazing would be managed to improve or maintain the productivity of the area, and would not affect the native prey base of the wolf.

Conclusion

We concur with your determination that the proposed action may affect, but is not likely to adversely affect the Mexican gray wolf. No critical habitat will be affected because none has been designated. Our concurrence is based on the following:

- Any wolves likely to be found in the action area are considered part of the experimental, non-essential population, so no action could lead to jeopardy for the species.
- The survival and reproduction of any wolves that may disperse from the experimental population into the action area would not be affected because the wolves would move to another area if disturbed, and the prey base is unlikely to be adversely affected by livestock management.

Most of the allotment is classified as category 2 desert tortoise habitat, with the upper elevations being classified as category 3 habitat. Arizona Standards For Rangeland Health And Guidelines For Grazing Administration require in Guideline 3-2. "Conservation of Federal threatened or endangered, proposed, candidate, and other special status species is promoted by the maintenance or restoration of their habitats." Implementation guidance for the Standards and Guidelines (S&G) states "The authorized officer will review existing permitted livestock use, allotment management plans, or other activity plans which identify terms and conditions for management on public land. Existing management practices, and levels of use on grazing allotments will be reviewed and evaluated on a priority basis to determine if they meet, or are making significant progress toward meeting, the standards and are in conformance with the guidelines. " As part of this review, the "Tortoise Habitat Management On The Public Lands: A Rangeland Plan" is the guiding document for management.

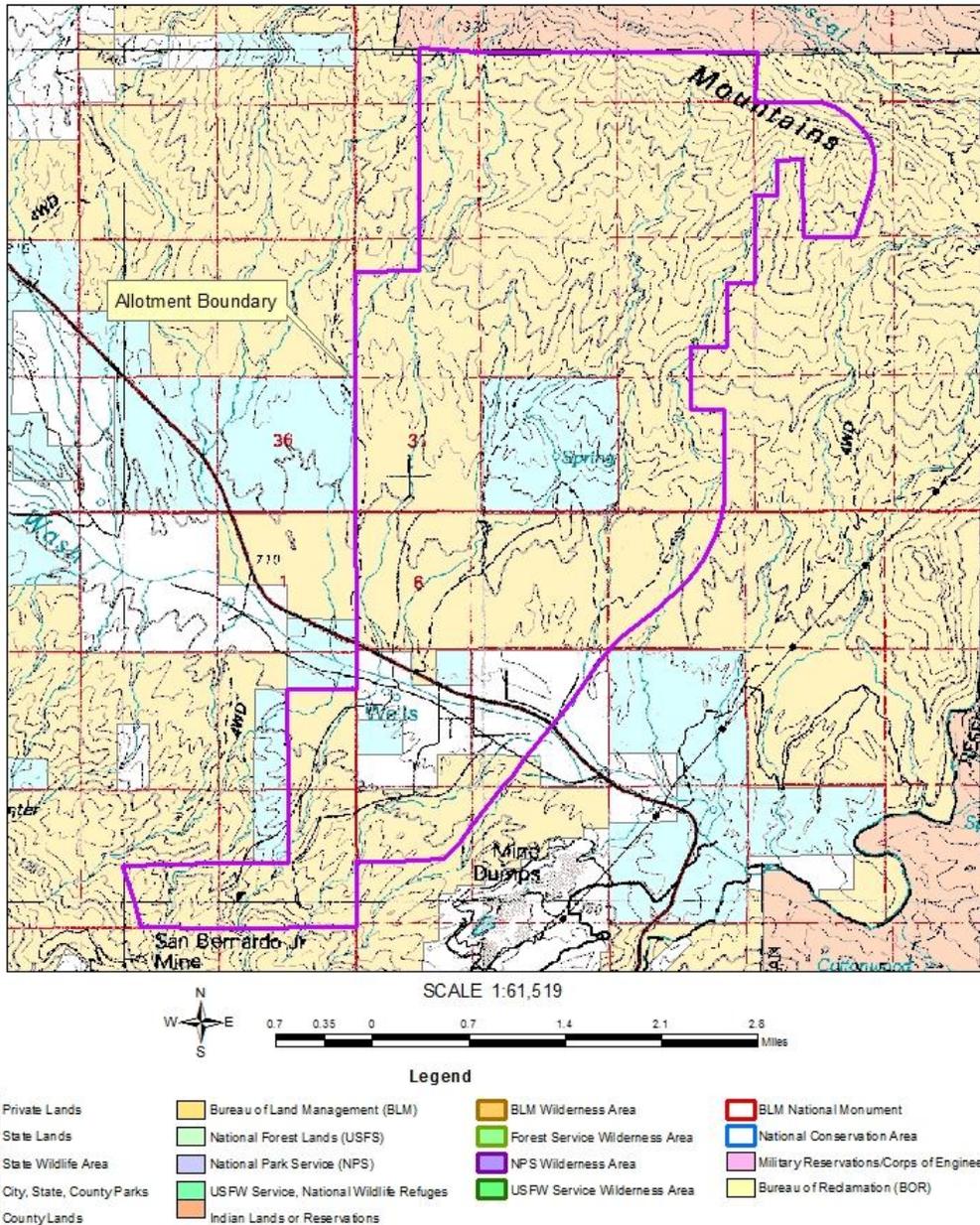
Objective 10 of the plan deals with livestock grazing within desert tortoise habitat. The pertinent parts of the objective are Objective 10. Ensure that livestock use is consistent with the Category Goals, Objectives, and Management Actions of this Rangeland Plan. This may include limiting, precluding, or deferring livestock use as documented in site-specific plans.

- Management Action 10A. In every grazing allotment which includes tortoise habitat, manage livestock to allow adequate and suitable native forage, space, and cover to be available to tortoises throughout the year.
- Action 10B. Where site potential permits, manage livestock grazing to increase native perennial grasses, forbs, and shrubs that are required by tortoises. Management Action
- 10C. Allow utilization of tortoise forage and cover plants by livestock only to levels which allow for long-term plant vigor and adequate standing vegetation for late summer-fall tortoise use.
- Management Action 10D. Management of livestock grazing would allow only those new range improvements for livestock in Desert Tortoise Category I and II Habitat Areas that would not create conflicts with tortoise populations. Mitigation for such conflicts is permissible to make the net effect of the improvements positive or neutral to desert tortoise populations. Conflicting existing improvements should be eliminated as opportunities arise. Where range improvements are necessary and/or permitted, access and activities would be located and implemented to minimize additional disturbance to resources.

11.1 Maps

11.1.1 Limestone Allotment vicinity map

Limestone Allotment



United States Department of the Interior
 Bureau of Land Management
 Arizona State Office
 Land Status updated as of November 2012
 Map Prepared: 5/24/2013

Document Path: T:\AZIAZ_BASS_PROJECT_S\11\Print\limestone

Figure 1 Map 1, Limestone Allotment

11.1.2 Former proposed WSA AZ-4-1B

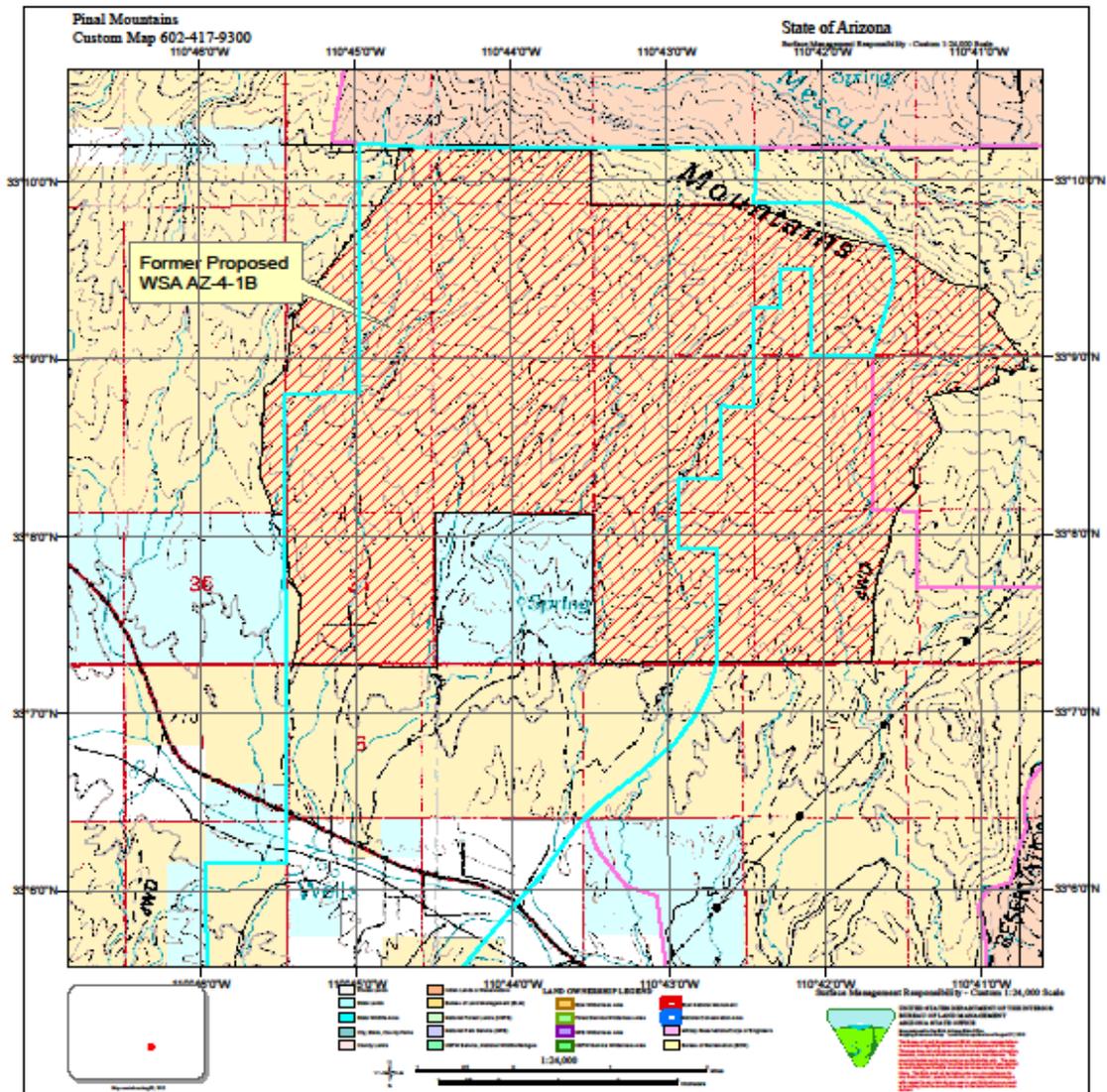


Figure 2 Map 2, Former proposed W S A AZ-4-1B