

Decision Notice for the Sunflower Allotment Grazing Analysis Project

USDA Forest Service
Mesa Ranger District
Tonto National Forest
Gila and Maricopa Counties, Arizona

Introduction

The Sunflower Allotment encompasses approximately 155,480 acres northeast of Fountain Hills, Arizona extending from the Salt River and Saguaro Lake up along Four Peaks, ending just south of Sunflower, Arizona. It lies east and west of State Route 87 and is accessed by numerous forest roads. The allotment contains portions of 1985 Tonto National Forest Plan (Forest Plan) Management Areas (MA) 3D (Four Peaks Wilderness), 3E (Bush Highway Research Natural Area), 3H (Proposed Sycamore Creek Natural Area), and 3I (General Management Area).

The Mesa Ranger District proposes to authorize livestock grazing management actions for the Sunflower Allotment as guided by the 1985 Tonto National Forest Plan (Forest Plan). The Sunflower Allotment, including the four units—Cline, Cottonwood, Desert, and Dos S—are described in detail in chapter 1 of the Final Environmental Assessment for Sunflower Allotment Grazing Analysis (Final EA). The last section of the Final EA includes the finding of no significant impact as required in *40 CFR 1501.4*.

The purpose of and need for this proposed action is for authorization of livestock grazing in a manner that maintains and/or moves toward Forest Plan objectives and desired conditions. Authorization is needed on this allotment because:

Where consistent with other multiple use goals and objectives, there is Congressional intent to allow grazing on suitable lands (*Multiple Use Sustained Yield Act of 1960, Wilderness Act of 1964, Forest and Rangeland Renewable Resources Planning Act of 1974, Federal Land Policy and Management Act of 1976, National Forest Management Act of 1976*).

This allotment contains lands identified as suitable for domestic livestock grazing in the Tonto National Forest Plan (Forest Plan) and continued domestic livestock grazing is consistent with the goals, objectives, standards, and guidelines of the Forest Plan (Forest Plan pages 24, 91 - 118).

It is Forest Service policy to make forage available to qualified livestock operators from lands suitable for grazing consistent with land management plans (*FSM 2203.1; 36 CFR 222.2 (c)*).

It is Forest Service policy to continue contributions to the economic and social well-being of people by providing opportunities for economic diversity and by promoting stability for communities that depend on range resources for their livelihood. (*FSM 2202.1*)

There is a need for change:

- The allotment has been in non-use for over ten years. The non-use decision included re-evaluating the allotment after ten years to determine when grazing could resume.
- There is a need to develop a livestock management plan that will maintain or continue to move toward desired conditions.

Decision and Reasons for the Decision

Based upon my review of the two alternatives analyzed in detail in the Final EA—the no grazing and the proposed action—I have decided to implement the proposed action described under Alternative 2 in chapter 2 of the Final EA. The selected alternative will authorize managed livestock grazing within the Sunflower Allotment in a manner that is consistent with Forest Plan standards, guidelines, and objectives and maintains or improves natural resource conditions. Livestock will be grazed using a rotational system in the Cline, Cottonwood, and portions of the Dos S unit. Stocking rates, within each unit, will be independent from the other units and managed as separate herds. The Otero, Ranger Station, Sycamore Creek Riparian, and Adams—west of SR 87—pastures within the Dos S Unit, and the Desert Unit will be placed into non-use (approximately 56,724 acres total) until such time as a new environmental analysis is conducted to show the need for these pastures and the effects of authorizing grazing within them.

The proposed action consists of four components: authorization, improvements, monitoring, and management practices. The proposed action follows current guidance from Forest Service Handbook 2209.13, Chapter 90 (Grazing Permit Administration; Rangeland Management Decision making). The four components are described below:

1. Authorization

Livestock grazing within the Sunflower Allotment will be conducted under the following terms:

Permitted Livestock Numbers—proposed permitted use numbers will vary from 2,700 to 6,300 Animal Unit Months (AUMs¹), year-long. Table 1 shows this range of numbers per unit based on estimated capacity numbers. A rotational system of grazing will be implemented which will allow plants an opportunity for growth or regrowth.

Table 1: Proposed Stocking Numbers Based on Estimated Production

Unit	Estimated Initial Stocking (cow/calf pairs)	Maximum Stocking – Upper Limit (cow/calf pairs)	Capacity Numbers Based on 2014 Production Data AUMs/Number
Cottonwood East	50 – 75	100 – 125	3,599/300
Cottonwood West	50 – 75	100 – 125	
Cline	75 – 100	125 – 150	1,841/153
Dos S	50 – 75	100 – 125	2,524/210
Total	225 – 325	425 – 525	7,964/664

Initial stocking, within any given unit, will not occur until all existing water developments (windmills, pipelines, storage tanks, dirt tanks, and troughs) and new and/or existing unit/pasture fences (interior and allotment boundary) are functional and maintained to Forest Service Standard as required in *Forest Service Manual 2240.41(a)*. Prior to any livestock returning to the allotment, a unit/pasture

¹ The amount of forage needed by an “animal unit” (AU) grazing for one month. The quantity of forage needed, based on the cow’s weight, and the animal unit is defined as one mature 1,000 pound cow and her suckling calf. It is assumed that such a cow nursing her calf will consume 26 pounds of dry matter of forage per day.

inspection will be conducted by Forest Service personnel and the permittee/manager to evaluate range condition, water distribution, and availability, and ensure improvements are functional.

Initial stocking numbers, within any given unit, will not exceed those listed in the “Estimated Initial Stocking” numbers listed in Table 1. Annual authorized livestock numbers may be adjusted from initial stocking levels. A stock and monitor approach, consistent with regional Forest Service direction *R3 Supplement to FSH 2209.13 Chapter 90*, will be used to establish grazing capacity over the long term (five to ten years). Actual permitted levels of grazing will be determined annually by the Mesa District Ranger with the permittee based on the results of monitoring and successful implementation of management practices. Other considerations include development of new range improvements, forage utilization patterns, economic factors, and climate forecasts. Typical increases may be around 15 percent annually, up to the upper limit shown in Table 1.

Grazing System—livestock will be grazed using a rotational system. Stocking rates, within each unit, will be independent from the other units and managed as separate herds. The Otero, Ranger Station, Sycamore Creek Riparian, and Adams—west of State Route 87—pastures within the Dos S Unit, and the Desert Unit, will be placed into non-use (approximately 56,724 acres total). Non-use within these units/pastures will benefit riparian resources and sensitive species concerns associated with Sycamore Creek and Mesquite Wash. Additionally, non-use will benefit Sonoran Desert tortoise populations and habitat known to occur in the Adams pasture and remove conflict between heavy recreational pressure and livestock grazing practices. Non-use will continue until such time as a new environmental analysis is conducted to show the need for these pastures and the effects of authorizing grazing within them. Table 2 includes the proposed unit/pasture scheme, as well as the 2014 estimated AUMs and approximate acreage of each.

Table 2: Proposed Unit/Pastures Including Estimated and Proposed AUMs and Acreage

Unit	Pastures	Approximate AUMs [†]	Proposed AUMs/Unit	Acreage
Cline	Ballantine	708	900 – 1,800	6,228
	Cline	714		5,613
	Mud Springs	419		4,307
				Total: 16,148
Cottonwood Unit West	Adams	283	600 – 1,500	2,426
	North	1159		12,469
	South	550		9,819
				Total: 24,714
Cottonwood Unit East	Alder Creek	648	600 – 1,500	11,051
	Cane Springs North	388		5,167
	Cane Springs South	571		10,822
				Total: 27,040
Dos S	Maverick	567	600 – 1,500	5,296
	Picadilla	1089		11,205
	Pine Creek	868		13,482
				Total: 29,983
Totals		7,964	2,700 – 6,300	97,885*

[†] Based on 2014 Production Data

*This number does not include the acreage associated with the various traps and corrals used for livestock management.

The reconfiguration of the Cline, Cottonwood (East and West), and Dos S Units will primarily be accomplished using existing fencing and natural barriers; however, there are a couple of known

locations where short sections of new unit and/or pasture boundary fences or gap fencing will be constructed. When natural boundaries are used, livestock drift can occur along roads, trails, and drainages, if accessible to livestock. Active management practices such as herding and salting can be used to minimize this. However, if these management practices don't correct livestock from drifting between pastures, the permittee will be responsible for immediately locating areas of drift and installing fence to ensure livestock remain in the appropriate pasture. Additionally, each unit herd will be ear tagged using different colored tags in order to differentiate between unit herds. This will be required to ensure that livestock are within their designated units; and if not, identify locations where additional gap fencing may be needed.

Each unit will be managed using a rotational grazing system, in which pastures within each unit will receive periodic deferment allowing for plant physiological needs in order to achieve desired resource conditions². Pasture use periods will be kept flexible, to the extent possible, in consideration of estimated AUMs. Actual pasture season of use each year will depend on observed resource conditions. The grazing period within each pasture will be based upon weather/climate conditions, water availability, current growing conditions, and the need to provide for plant regrowth following grazing. The length of the grazing period within each pasture will also be considered and managed for the desired grazing intensity and utilization guidelines.

Management Tools—if monitoring indicates that desired resource conditions outlined in Chapter 1 are not being achieved in the desired time frame, there are tools, or administrative actions that will be used to modify management. Such changes may include annual administrative actions to adjust the specific number of livestock and/or animal unit months, specific dates for grazing, class of animal, or pasture rotations. These changes will not exceed limits for timing, intensity, duration, and frequency, as described in the proposed action.

Necessary changes will be implemented through annual operating instructions (AOI), which will adjust use to be consistent with current productivity and resource conditions. The AOI will also include mitigation measures and Best Management Practices to avoid or minimize effects to wildlife, soil, and water quality. Modifications to the AOI may be implemented at any time throughout the grazing season in response to unforeseen environmental concerns such as drought, fire, flood, etc., or management and livestock operation concerns.

The following is a list of when administrative actions will be necessary in the management of this allotment:

- Monitoring shows management objectives have not been achieved or that trend toward achieving desired conditions is not occurring.
- Annual indicators of grazing use or grazing guidelines are not met.
- Climatic events, fire, flood, or uses and activities detrimentally impacting resource conditions and a modification of grazing use is needed to provide for recovery of the site.

² Desired resource conditions and management objectives for each resource area are identified and discussed in Chapter 3 of the Final EA.

There are several types of administrative actions that could take place within the allotment. These actions will comply with the Forest Plan and mitigations detailed later in this section. The following list includes some of these actions:

- Extending or shortening time in a pasture based on utilization levels in uplands and riparian areas;
- Assessing the readiness of a pasture and changing its position in the rotation for the season;
- Time or season of pasture use;
- Resting a pasture for one or more growing seasons;
- High intensity, short duration, or other grazing system;
- In the event of extended drought, severe fire, or depleted rangelands, complete removal of livestock until rangelands have recovered;
- Decrease or increase herd size within the limits of the permitted numbers;
- Temporarily closing off water in a portion of a pasture to manipulate grazing pressure and intensity of use;
- Use of salt and mineral blocks to aid in distribution, especially away from critical areas such as riparian areas;
- Herding livestock;
- Excluding livestock from specific areas temporarily or permanently for other resource objectives; or
- Changing or limiting season of use to minimize impacts to riparian vegetation and water quality.

If monitoring indicates desired conditions are not being met, the range specialist, in consultation with the permittee and resource specialists, as appropriate, will:

- Evaluate the potential cause for not meeting desired condition or indicator such as utilization;
- Evaluate the need to implement alternative strategies;
- Generate documentation necessary in the AOI and/or permit and allotment files for the action to be implemented; and
- As necessary, conduct additional site specific surveying, such as for cultural resources.

2. Range Improvement Infrastructure

Adding fencing, constructing livestock handling facilities, protecting springs, and developing additional watering sources may be beneficial to livestock management, facilitate better livestock distribution, reduce undesirable effects to riparian vegetation and wildlife habitat, or otherwise improve the rangeland resource. Existing range improvement infrastructure will be brought up to agency standards prior to installing any new developments. An exception to this may be that a particular existing improvement is determined, because of location, competing uses, livestock needs, or type is determined to no longer be feasible or necessary to maintain. Such improvements will then be removed. Allotment administration will determine whether identified structural improvements are necessary or need to be modified.

All new structures will have heritage clearances prior to implementation. Additional sideboards include the following:

- New spring developments will be constructed with the spring box designed so that residual flow is left at spring head to prevent dewatering.
- Any new spring developments will be fence to exclude livestock access with a trough(s) provided outside of the enclosure to provide water to livestock and wildlife.

- New troughs will be placed in the uplands, at least 300 feet away from riparian areas.
- New fencing will be constructed using a “wildlife friendly” design which includes; upper three strands barbed wire, top wire not to exceed 42 inches and lowest strand smooth wire set at 18 inches to allow wildlife to safely pass under.
- Old fence material will be removed from the forest when fence is replaced or repaired;
- New troughs, supplements, and/or salt will not be located within .25 miles of the Sonoran Desert tortoises’ preferred habitat, which includes rocky, boulder-covered hills and mountains in Sonoran Desert scrub habitat. This will help ensure that livestock congregation areas (near water) are outside of tortoise foraging areas.
- Place supplements where forage is abundant and current grazing use levels are low. Supplements should not be placed at any one location more than once during the grazing season to prevent concentration of livestock.
- Improvements proposed within Sonoran Desert tortoise habitat, will require pre-construction surveys and monitoring to ensure that individual tortoises are not present within the action area.

The following improvements will be constructed in order to facilitate livestock distribution throughout the allotment and assist in achieving the desired conditions and management objectives set forth in this analysis. The proposed fencing projects listed below will be installed prior to any livestock returning to the affected units/pastures. However, it is not necessary for the proposed additional water developments to be completed in a specific order or even in the same year. At present, funding has not been secured for the implementation of the proposed water developments. Examples of potential funding sources include individual allotment permittee funding, permittee labor matches, a variety of potential grants and Range Betterment Funds. Implementation of the proposed range improvement infrastructure will be based on available funding and management objectives.

Proposed Fencing:

- Installation of an enclosure fence above and below Hidden Water Spring (T3N, R9E, Section 21) to allow riparian vegetation above and below the spring to improve. The spring itself is currently fenced to exclude livestock access to protect an established Gila topminnow population. The trough located outside of the current enclosure, which is fed by the spring, will remain in place to provide water for livestock. This location is within the Four Peaks Wilderness, so no mechanized or mechanical equipment can be used during installation. The installation of this type of improvement is provided for under the Wilderness Act establishing the Four Peaks Wilderness and the Forest Plan for MA 3D.
- Two sections of fence separating the Dos S Unit, Picadilla Pasture, and the Ballantine Pasture of the Cline Unit (T5N, R9E, Section 31). The remaining unit division will be accomplished using natural barriers.
- Installation of two sections of fence within the proposed Cottonwood West Unit to separate the North and South pastures (T4N, R9E, Sections 29 and 32; and T3N, R9E, Section 3).

Proposed Water Developments:

- Addition of a storage tank—equal to or less than 10,000 gallons—off Forest Service Road 3484 (T4N, R9E, Section 3) to supply water to a new 300 gallon trough in the Cline Unit/Cline Pasture (T5N, R9E, Section 34).
- Install a new pipeline from the existing Mountain Spring pipeline, to convey water to a new 300 gallon trough in Cline Unit/Ballantine Pasture. This pipeline currently conveys water to four troughs along its length (T5N, R9E, Section 34).

- Addition of a storage tank—equal to or less than 10,000 gallons—off Forest Service Road 3537 in the Dos S Unit/Maverick Pasture (T6N, R8E, Section 35). Water will be hauled to fill new tank. Pipeline will convey water from tank to a new 300 gallon trough (T5N, R8E, Section 2).
- Addition of a storage tank—equal to or less than 10,000 gallons—on the existing Mud Springs pipeline in the Dos S Unit/Pine Creek Pasture. This pipeline currently conveys water to four troughs along its length (T5N, R9E, Section 5).
- Addition of a storage tank—equal to or less than 10,000 gallons—in Rolls Trap (Cottonwood West Unit/South Pasture) (T3N, R8E, Section 1) to supply water to a new 300 gallon trough (T3N, R9E, Section 6). Water to fill the storage tank will be hauled to tank.
- In the Cottonwood West Unit/South Pasture, install approximately 1 mile of pipeline from an existing well (Cottonwood) to convey water to a new trough to be located in the uplands south of the well (T3N, R9E, Sections 8 and 17).
- Addition of a storage tank—equal to or less than 10,000 gallons—at the head of Mine Mountain Spring in Cottonwood West Unit/North Pasture (T4N, R9E, Section 9). Tank will supply water to the existing five troughs along the pipeline. Additionally, a pipeline and trough will be added to an existing trough along the pipeline (T4N, R9E, Sections 17 and 20). The new pipeline and trough will be installed within the Four Peaks Wilderness. The installation of this type of improvement is provided for under the Wilderness Act establishing the Four Peaks Wilderness and the Forest Plan for MA 3D.

3. Monitoring

Forage utilization will be managed at a level corresponding to light to moderate grazing intensity in order to provide for grazed plant recovery, increases in herbage production, and retention of herbaceous litter to protect soils. Conservative use equates to 30 to 40 percent on herbaceous species and less than 50 percent use on browse. Consistent patterns of utilization in excess of 40 percent on key species in key areas will be used as a basis to modify management practices or take administrative actions necessary to reduce utilization in subsequent grazing seasons. It is inherent in the term “conservative use” that watershed conditions and vegetative ground cover will be optimized as appropriate to various range sites. At no time will excessive use be considered acceptable.

The goal is to achieve conservative use in the uplands over successive years. This strategy recognizes the importance of the annual operating instructions in allowing for modification of management. These actions include, but are not limited to; adjustments of timing, intensity, frequency, and duration of grazing to reach resource objectives (FSH 2209.13 - Chapter 90). The document, *Principles of Obtaining and Interpreting Utilization Data on Southwest Rangelands* (Smith *et al.*, 2005³), will provide guidance for utilization data collection and interpretation.

The objective of monitoring is to determine if management is being properly implemented and if the actions are effective at achieving or moving toward desired conditions.

Effectiveness Monitoring—includes measurements to track long-term condition and trend of upland and riparian vegetation, soil, and watersheds. Examples of effectiveness monitoring indicators include, but are not limited to pace transects, pace quadrat frequency, dry weight rank, ground cover, Parker 3-step, repeat photography, and Common Non-forested Vegetation Sampling Procedures which

³ Any citations found in the notice can be found in the reference section of the Final EA.

measures; frequency, fetch, dry-weight rank, production, and utilization. Monitoring will occur at established permanent monitoring points. Both qualitative and quantitative monitoring methods will be used in accordance with the *Interagency Technical References* (ITR, 1996, revised 1999), *Region 3 Rangeland Analysis and Management Training Guide* (USDA FS, 1997), and the *Region 3 Allotment Analysis Guide*. These data are interpreted to determine if management is achieving desired resource conditions, if changes in resource condition are related to management, and to determine if modifications in management are necessary.

Changes in riparian vegetation and stream channel geomorphology condition and trend will be measured at five to ten year intervals (effectiveness monitoring using methods described in Burton, *et al.*, (2011), Harrelson, *et al.*, (1994), photo point monitoring, or the most current acceptable method.

Implementation Monitoring—will occur yearly and will include such things as inspection reports, forage utilization measurements in key areas, livestock counts, and facilities inspections. Utilization measurements are made following procedures found in the *Interagency Technical Reference* (ITR, 1996, revised 1999), or the most current acceptable method, and with consideration of the *Principles of Obtaining and Interpreting Utilization Data on Southwest Rangelands*. The purpose of implementation monitoring is to determine if grazing meets conservative use guidelines in upland and riparian areas.

Utilization will be monitored on key forage species, which are native perennial grasses or browse species that are palatable to livestock. At a minimum monitoring will include use in key areas, but may include monitoring outside of key areas. The Mesa Ranger District range personnel, the permittee, and cooperators will be responsible for monitoring livestock grazing utilization. Over time, changes in resource conditions or management may result in changes in livestock use patterns. As livestock use patterns change, new key areas may be established and existing key areas may be modified or abandoned in cooperation with the permittee and cooperators.

Information will be collected through routine pasture inspections and end of season utilization monitoring. Specific schedules for monitoring will be flexible from year to year based upon resource needs, which could change with climatic variations and management changes. Monitoring for plant cover, vigor, recruitment, and diversity, using techniques described in aforementioned publications, will ensure that wildlife needs and riparian and watershed conditions were moving toward desired conditions.

Monitoring methods could include, but are not limited to, utilization and stubble height monitoring, annual riparian monitoring, and photo point protocols. Data will be used, along with supporting information to determine when livestock must be moved from one pasture to another and to make any necessary adjustments to livestock numbers and/or season of use (determined in AOI).

Key areas are described in “sampling vegetation attributes” (ITT, 1996) as indicator areas that are able to reflect what is happening on a larger area as a result of on-the-ground management actions. A key area should be an area representative of the range as a whole, an area where livestock use occurs, located within a single ecological site and plant community, and be a minimum of 100 yards from

fence lines, exclosures, roads, and trails. Key areas may be identified in the allotment management plan.

While monitoring techniques as described above will be conducted in key areas, these will not be the sole locations for gathering information from the grazing allotment to make decisions about the timing, intensity, duration, or frequency of livestock grazing in a given grazing season. The overall condition of the allotment, and such things as distribution patterns or rangeland improvement conditions could be assessed at any given time to help make those decisions.

Riparian Utilization Monitoring—riparian components in key reaches will be monitored using riparian utilization measurements (implementation monitoring) following methods in *Sampling Vegetation Attributes and Utilization Studies and Residual Measurements* (ITR, 1996, revised 1999) and *Multiple Indicator Monitoring (MIM) of Stream Channels and Streamside Vegetation* (Burton, *et al.* 2011) or the most current acceptable method.

In order to achieve Forest Plan standards and guidelines, the following use guidelines for riparian components are as follows: *obligate riparian tree species* – limit use to less than 50 percent of terminal leaders (top one third of plant) on palatable riparian tree species accessible to livestock (usually less than 6 feet tall); *deergrass* – limit use to less than 40 percent of plant species biomass; *emergent species* (rushes, sedges, cattails, and horsetails) – maintain six to eight inches of stubble height during the grazing period.

The Forest Plan limits use to 20 percent of tree and shrub annual production by volume. The percent of leaders browsed was chosen as a surrogate guideline in place of percent volume because volume is an extremely difficult parameter to assess on an annual basis.

Once riparian utilization guidelines are met, cattle will be moved from the riparian area or to the next scheduled pasture, even though forage may still be available in the uplands. Actual use records in combination with utilization measurements will inform if it may become necessary to minimize or remove access to riparian habitat, if grazing pressure becomes a limiting factor in the use of pastures. Allowable use for riparian and upland vegetation is summarized in Table 3.

Table 3: Upland and Riparian Utilization Guidelines

Vegetation	Use Threshold
Upland Herbaceous Use	30-40% of current year's growth
Upland Browse Species	50% of current year's growth
Riparian Herbaceous Use	Limited to 40% of plant species biomass for deergrass and maintain 6-8 inches of stubble height for emergent species such as rushes, sedges, cattails, and horsetails; measured during grazing season.
Riparian Woody Species	Limited to 50% of leaders browsed on upper 1/3 plants up to 6 feet tall

Heritage Resource Monitoring—in accordance with Appendix H, the *Standard Consultation Protocol for Rangeland Management of the First Amended Programmatic Agreement Regarding Historic Property Protection and Responsibilities* between the USDA Forest Service Region 3, the

State Historic Preservation Officers of Arizona, New Mexico, Texas, and Oklahoma, and the Advisory Council on Historic Preservation, signed December 24, 2003, monitoring will be conducted as part of the day-to-day activities of the professional cultural resource specialists and certified para-archaeologists working in the area. Grazing allotments cover most of any given forest, and when archaeologists are in the field conducting surveys, they are most likely surveying within a grazing allotment. The archaeologists will use these opportunities to observe and report on grazing activities, the effectiveness of the grazing strategy, and potential impacts to heritage resources. Any incidents of damage to historic properties from grazing will be reported, and the archaeologists will draw upon the protection measures outlined in the Protocol to ensure that the effects are avoided or minimized.

Invasive Species Monitoring—invasive species known to occur within the project area will be treated as necessary. Permittee, Forest Service, or cooperators will coordinate weed inventory and treatment. Invasive species monitoring is carried out at the same time as allotment inspections are conducted and will follow monitoring practices established in the Environment Assessment for Integrated Treatment of Noxious or Invasive Weeds as detailed in the decision notice and finding of no significant impact, page five (August 2012). As noxious weed populations are found they are mapped, monitored, and treated. Treatment methods will follow guidelines established in the *Environment Assessment for Integrated Treatment of Noxious or Invasive Weeds*, with a decision notice signed on August 24, 2012.

4. Management Practices and Mitigation Measures

Range—livestock management practices, such as herding and salting, are critical to achieve proper livestock distribution within each unit/pasture. The permittee will be required to furnish sufficient riders or herders for proper distribution, protection, and management of cattle on the allotment. Tonto National Forest Grazing Practices are as follows:

- Forest Plan Standards and Guidelines applicable to livestock grazing will be followed (Forest Plan, p. 24).
- Salt and/or supplements will be placed where forage is abundant and current grazing use levels are low. Salt and/or supplements will not be placed any closer than .25 miles from developed or live water, recreation sites, or designated trails except where prior written approval had been obtained from the District Ranger.
- No salting will occur within or adjacent to identified heritage sites. Salt will be removed from pastures when cattle have left an area, and not placed within a pasture until the cattle arrive. Additionally, salt will not be placed in the same location(s) each year.
- All troughs will be left full of water and operational year round for wildlife accessibility, unless in limited circumstances where extreme freezing conditions may damage facilities.
- When entering the next scheduled pasture, all livestock will be removed from the previous pasture within two weeks (dependent on terrain). This is critical for pastures with key riparian reaches.
- Permittee will ensure that enough time is allowed to remove livestock to meet the pasture move date(s) and avoid unauthorized and excess use.
- Permittee will ensure all infrastructures are in functioning condition prior to entering the next scheduled pasture.

Travel Management—the permittee will continue to access the allotment on existing roads and trails as designated by Forest maps to avoid the creation of illegal off-highway vehicle (OHV) trails. Road maintenance that is required to access range improvements or livestock management must receive a road use permit for any road work. Tonto National Forest is currently planning the implementation of

Travel Management Rule. These programs are aimed at reducing non-essential roads for watershed and resource protection and will require the following:

- Travel Management Decision will be followed by the permittee.
- If access is needed to enter a motor vehicle restricted area, the permittee must have special authorization through an OHV Permit or special authorization through the AOI.

Road maintenance that is required to access range improvements or livestock management must receive a road use permit for any road work. In the event of significant future deviations from “current access needs” for motorized use as authorized by a Term Grazing Permit, there may be the requirement for additional environmental analysis on a site-specific basis, to comply with NEPA. The AOI authorizing each year’s grazing activity will include a brief discussion of the use of vehicles and OHVs within the designated road system, any single purpose use roads or trails, and a description of the annually anticipated level of cross-country travel and access consistent with Part 3 of the term grazing permit and/or AMP.

Wilderness—management emphasis for wilderness is on wilderness values. It provides for livestock grazing and recreation opportunities that are compatible with maintaining wilderness values and protecting resources. Section 4(c) of the *Wilderness Act of 1964* defines minimum requirements for administrative actions in wilderness areas, which includes grazing. Wilderness resources must be considered when preparing range improvement construction standards and techniques (2323.26a).

Section 4(d)(4)(2) in FSM 2320.5 states that “...wilderness designation should not prevent the maintenance of existing fences or other livestock management improvements, nor the construction and maintenance of new fences or improvements, which are consistent with allotment management plans and/or which are necessary for the protection of the range.”

Compliance with the *Wilderness Act* in the Four Peaks Wilderness area is important and expected of all users on the allotments. The permittee should strive to maintain the untrammeled, natural conditions within wilderness areas. No motorized equipment should be used in wilderness areas without obtaining authorization from the Regional Forester.

Wildlife—since site specific information regarding precise location and timing of the various and projects described above (water developments, pastures and fencing) are not available at this time, the Forest Service will implement the following actions to protect listed species:

- The Forest Service will conduct site specific analysis of effects to listed species and/or proposed species or designated and/or proposed critical habitat before projects are implemented.
- If the Forest Service determines that projects “may affect” any listed and/or proposed species or designated and/or proposed critical habitat, section 7 consultation with the Service will be reinitiated.
- All water developments will include wildlife access and escape ramps. When possible, waters will be kept available to wildlife year round.
- All fencing will be built to Forest Service standards to provide for wildlife passage through the fence. At a minimum, this will be a four-strand fence with smooth bottom wire 18 inches off the ground and a total height of 42 inches or less.

- Conservative forage utilization standards (30 – 40 percent) outlined in the proposed action will provide for adequate levels of residual plant cover to maintain fruits, seeds, and allow for plant regeneration in Mexican spotted owl critical habitat.
- Livestock exclosure fences around Mud and Hidden Water Spring will be maintained to prevent unauthorized livestock access.
- Improvements proposed within Sonoran Desert tortoise habitat will require pre-construction surveys and monitoring to ensure that individual tortoises are not present within the action area.
- New troughs, supplements, and/or salt will not be located within .25 miles of the Sonoran desert tortoises' preferred habitat, which includes rocky, boulder-covered hills and mountains in Sonoran desert scrub habitat. This will help ensure that livestock congregation areas (near water) are outside of tortoise foraging areas.
- Existing vehicular travel routes, trails, and/or channel crossing will be used to reduce soil, vegetation, and human disturbance to tortoise.
- Reduce soil and vegetation disturbance when conducting ranch activities. When practicable, livestock will be moved using established trails, roads, travel routes, and channel crossings.
- Implement grazing management practices to achieve or make significant⁴ progress toward meeting desired conditions within tortoise habitat.
- Coordinate with AGFD and incorporate their Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects into the aspects of the proposed action that include construction of grazing and rangeland infrastructure.

Heritage—mitigation of impacts to heritage resources is best accomplished by avoidance of these properties by the placement and construction of all range improvements. It can also be achieved by minimizing opportunities for the localized concentration of animals, improving distribution across the allotment and across each pasture, and by reducing the intensity of grazing for the allotment as a whole. In instances where proposed improvements will involve any potential for ground disturbance, such as stock tanks and other water developments, a 100 percent archaeological survey will be conducted for areas which have no previous survey coverage, or have outdated surveys, which do not conform to current standards. Other, more specific mitigation requirements may be identified as each of these improvements is developed and a heritage inventory is made of their areas of potential effect. Such protective measures are developed in accordance with the goals of the project, taking into account site vulnerability as well as the methods of project implementation. All inventoried heritage sites are treated as eligible for the National Register of Historic Places with the exception only of those that have been formally determined to be not eligible in consultation with SHPO. Archeological clearance must be approved with all necessary consultation with SHPO and the potentially interested Tribes prior to issuing any decision regarding the construction, modification, or removal of all improvements. This approach, based on long-term consultation with SHPO and on Region 3 policy as embodied in the *First Amended Programmatic Agreement Regarding Historic Property Protection and Responsibilities* between the USDA Forest Service Region 3, the State Historic Preservation Officers of Arizona, New Mexico, Texas, and Oklahoma, and the Advisory Council on Historic Preservation, signed December 24, 2003, and specifically, Appendix H, the *Standard Consultation Protocol for Rangeland Management* developed pursuant to Stipulation IV.A of the *Programmatic*

⁴ The term “significant” in this context is from the USFWS concurrence letter and relates to the Endangered Species Act, not NEPA.

Agreement is considered to be the "standard operating procedure" for treating potential grazing impacts to heritage resources on the Tonto National Forest.

Protection measures identified under the *Protocol* include:

- Archaeological survey will be conducted for areas proposed for surface disturbance which have no previous survey coverage, or have outdated surveys, which do not conform to current standards.
- Relocation or redesign of proposed range improvements and ground-disturbing management practices to avoid direct and indirect impacts to historic properties.
- Relocation of existing range improvements and salting locations sufficient to ensure the protection of historic properties being impacted by concentrated grazing use.
- Fencing or enclosure of livestock from individual sensitive historic properties or areas containing multiple sensitive historic properties being impacted by grazing.
- Periodic monitoring to assess site condition and to ensure that protection measures are effective.

Other mitigation measures involving data recovery, for example, may be developed and implemented in consultation with the SHPO as the need arises. The appropriate tribes will be consulted, if the mitigation is invasive or if it affects a TCP or other property of concern for them.

Riparian—the following are riparian mitigation measures:

- Installation of an enclosure fence above and below Hidden Water Spring (T3N, R9E, Section 21) to allow riparian vegetation above and below the spring to improve. The spring itself is currently fenced to exclude livestock access to protect an established Gila topminnow population. The trough located outside of the current enclosure, which is fed by the spring, will remain in place to provide water for livestock. This location is within the Four Peaks Wilderness, so no mechanized or mechanical equipment should be used during installation. The installation of this type of improvement is provided for under the Wilderness Act establishing the Four Peaks Wilderness and the Forest Plan for MA 3D.
- All existing and new developed springs will be fenced to exclude livestock access. A trough(s) will be located outside of the enclosure to provide water for wildlife and livestock.
- Livestock will not be trailed through riparian areas.
- Salt and/or mineral supplements will be placed at least .25 miles from riparian areas.
- New spring developments will be constructed with the spring box designed so that residual flow is left at spring head to prevent dewatering.
- New troughs will be placed in the uplands, at least 300 feet away from riparian areas.

Invasive Species—as noxious weed populations are found they are mapped, monitored, and treated. Treatment of invasive species will be carried out in accordance with practices established in the *Environment Assessment for Integrated Treatment of Noxious or Invasive Weeds* as detailed in the decision notice and finding of no significant impact, pages three and four (August 2012).

Other Alternatives Considered

In addition to the selected alternative, I considered a no grazing alternative per *Forest Service Handbook 2209.13*—Alternative 1 as detailed in chapter 2 of the Final EA. Under this alternative, the term grazing permit would be cancelled following guidance in 36 CFR 222.4 and FSM 2231.62. According to *Forest Service Manual, Southwest Region Supplement 2240.3(2)*, “The Government holds title to all range improvements.” Existing boundary fences will be assigned to adjacent

permittees (if applicable). Interior fences and other infrastructure will be removed, as funding or workforce allows, mitigating potential adverse impacts to wildlife and public users. Water developments, important for wildlife, will be maintained, where feasible, or removed using other program funds or volunteers.

A comparison of these alternatives can be found at the end of chapter 2 in the Final EA.

Public Involvement and Scoping

In 2013, a scoping letter was sent out initiating the necessary National Environmental Policy Act (NEPA) compliance required to authorize grazing on the Sunflower allotment. On July 05, 2013, a Draft environmental assessment (EA) was made available for comment; and on September 17, 2013, a decision notice, including a finding of no significant impact, was signed by the District Ranger authorizing grazing on the Sunflower Allotment. Subsequent to this decision, appeals to the project were submitted and the decision was remanded back to the District Ranger.

In 2014, District and Forest range personnel, worked with the permittee to collect data across the allotment and develop a proposed action that incorporated allotment management objectives along with Forest Plan goals and objectives. The project was listed in the Schedule of Proposed Actions in August 2014. On November 14, 2014, a Public Notice was published in the Arizona Capitol Times, the newspaper of record, and a scoping letter was sent to 36 individuals, including state and federal agencies, environmental organizations, local government, and tribes. Participants were given 30 days to review and comment. Sixty-four comments were received from the scoping process. These comments were analyzed and considered to determine if additional alternatives were needed to address resource concerns. On April 10, 2015 a public notice in the *Arizona Capitol Times* newspaper began the 30 day comment period on the draft EA. Over 5,750 comments were received, nearly all of which were form letters⁵.

Based on the comments received from scoping, the Forest Service identified six primary concerns, listed below, that were raised related to the proposed action that was scoped. Some of these are either addressed in one of the two alternatives, are part of the analysis of the alternatives, and/or have been addressed through mitigation measures incorporated into the proposed action as shown directly following the concern.

- 1) *Address the cumulative environmental impacts of authorizing livestock grazing in an area already heavily impacted by recreational activities.*

Chapter 3 includes a detailed discussion of the affected environment and the direct, indirect, and cumulative effects of the alternatives on each of the resource areas.

- 2) *Range capacity determination.*

Forest Service personnel and the grazing permittee collected production data at 22 sites throughout the allotment. Ecological map units were used in determining selected sites. Capacity was estimated based on herbaceous and browse production, with consideration of conservative utilization levels (30 – 40 percent), slope, and

⁵ For a complete detail on how comments on the draft EA were addressed, see the Response to Comment Report in the project record.

distance to water. Estimated capacity is further discussed in Chapter 2 of the Final EA.

- 3) *Develop an alternative which will defer into non-use pastures that currently lack “developed water” sources, and authorize grazing only where such infrastructure already exists rather than develop natural springs or riparian areas.*

All of the units/pastures included in the proposed action currently have developed water sources and infrastructure in place.

The Forest Plan includes standards and guidelines under MAs 3I and 3D which recommend the use of structural and non-structural improvements and increased management to improve rangeland in less than satisfactory condition (Forest Plan, pp 101, 114, 115).

Best Management Practices included in Forest Service Handbook (FSH) 2509.22 – Soil and Water Conservation Practices Handbook would be used to protect soil and water resources:

- 22.12 – Controlling Livestock Distribution: to manage sustained forage production and forage utilization by livestock while protecting soil and water resources. Maintain healthy ecosystems for wildlife and other resources.
- 22.13 – Rangeland Improvements: to improve, maintain or restore range resources, including soil and water through the use of rangeland improvements.

- 4) *Develop an alternative which will defer all pastures with riparian habitat to non-use and authorize grazing only where the permit holder can transport water to upland improvements.*

All of the units/pastures, with the exception of the Desert Unit, contain some riparian habitat. The Desert Unit and a large portion of the Dos S Unit containing Sycamore Creek, Mesquite Wash, and Log Corral Canyon are proposed for non-use. Deferring the remaining units/pastures would be equivalent to the “No Grazing” alternative and will be analyzed in this document.

- 5) *Develop an alternative that excludes livestock grazing from all pastures containing Sonoran Desert habitat.*

Lands within the Sunflower Allotment have been identified as suitable for livestock use. The Forest Plan identifies four MAs within the Sunflower allotment; 3I, 3D, 3E, and 3H. The majority of the allotment is within MA 3I with an emphasis on managing (Level D) for a variety of renewable natural resources with primary emphasis on improvement of wildlife habitat, livestock forage production, and dispersed recreation. The majority of the Four Peaks Wilderness area is located in the southeastern portion of the allotment and is within MA 3D, with management (Level B) emphasis on “wilderness values while providing livestock grazing opportunities”. MA 3H includes the proposed Sycamore Creek Natural Area (60 acres) which is to be managed at Level B. MA 3E includes the Bush Highway Research Natural Area (488 acres) with an emphasis on management to provide opportunities of non-disruptive

research and education (Forest Plan pp 91 – 118). MA 3E is managed at Level A, which excludes the area from livestock grazing through fencing (Forest Plan p. 103). MAs 3H and 3E are located in the Dos S and Desert Units respectively, which are both proposed for non-use.

With the exception of MA 3E, none of these MAs include the exclusion of livestock grazing from Sonoran Desert habitat.

The No Grazing alternative includes an analysis of the effects of livestock exclusion from Sonoran Desert habitat.

6) *Consider climate change and drought impacts on range capacity.*

The Tonto National Forest follows Southwestern Regional drought guidelines found in Forest Service Handbook 2209.13. These guidelines consist of four elements: drought evaluation, management process, stocking during and after drought, and communication plan.

The issuance of the yearly annual operating instructions provide sufficient flexibility to allow management to be adjusted in recognition of changing circumstances such as drought or seasonal fluctuations in forage production. If monitoring indicates that desired conditions are not being achieved in a particular unit/pasture, management would be modified in cooperation with the permittee. Changes may include administrative decisions such as the specific number of livestock authorized annually, specific dates of grazing, class of animal (cow/calf pairs versus yearlings, steers or heifers, etc.) or livestock herd movement.

Finding of No Significant Impact

After considering the environmental effects described in the Final EA and incorporated specialist reports, I have determined that Alternative 2 will not have significant effects on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Details of the finding of no significant impact can be found in the Final EA. Thus, an environmental impact statement is not necessary and will not be prepared.

Findings Required by Other Laws and Regulations

As discussed in the separate resource sections of chapter 3 and in detail in the finding of no significant impact section of the Final EA, the actions associated with Alternative 2 comply with all applicable laws that the Forest Service must comply, including but not limited to: Multiple Use Sustained Yield Act; Wilderness Act; Forest and Rangeland Renewable Resources Planning Act; Federal Land Policy and Management Act; Clean Water Act; Endangered Species Act; Migratory Bird Treaty Act; and Clean Air Act.

Administrative Review and Objection Rights

The analysis for this Decision Notice was completed under the authority of the Project-level Predecisional Administrative Review Process per 36 CFR 218 parts A and B.

On July 3, 2015, the legal notice for the objection period for the Sunflower Allotment Grazing Analysis project was posted in the Arizona Capitol Times and an email we sent to all participants who had standing to object for this project. In this notice, the public was notified that a draft decision based on the final environmental assessment was made following the pre-decisional objection process, pursuant to Forest Service regulations at *36 CFR 218*. Eleven formal objections were filed. Of those, four submitters had complied with *36 CFR 218.8(d)*.


These objections were resolved with no changes from the draft decision notice brought forward. An official response to each objector was completed by the Reviewing Officer, Neil Bosworth, Tonto National Forest Supervisor.

Implementation Date

Implementation of activities under the selected action will occur based on this Decision Notice. Once this decision is signed, implementation of the Sunflower Allotment Grazing Analysis project can begin immediately pursuant to regulations at *36 CFR 218*.

Contact Information

Questions about this project should be directed to Kelly Kessler, project manager, at 480-610-3300 or kmkessler@fs.fed.us during normal business hours.


GARY HANNA
District Ranger
Mesa Ranger District
Tonto National Forest


Date