



United States
Department of
Agriculture

Forest Service



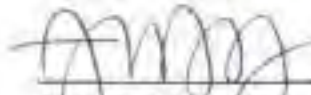
Memorandum of Understanding

Sunflower Allotment Cottonwood East Unit

Mesa Ranger District
Tonto National Forest
Arizona

This Memorandum of Understanding further implements direction established from the 2017 signed Allotment Management Plan for Sunflower Allotment. This Memorandum of Understanding is made part of your Term Grazing Permit in accordance of that permit.


Prepared by:


Andrea Jamie Wages
Range Management Specialist

Date:

9/11/2018


Agreed to by:


Horse Creek Farms
Permittee

Date:

7-20-18

Approved by:


Gary Hanna
Mesa District Ranger

Date:

9/11/2018

Sunflower Memorandum of Understanding

Table of Contents

Background	3
Allotment Management Plan.....	3
Permitted Use	3
Grazing System.....	3
Unit Grazing Implementation	4
Permittee Responsibilities	4
Forest Service Responsibilities.....	4
Mutual Responsibilities.....	4
Cottonwood East Unit.....	4
Timeline.....	4
Existing Water Development Standards: Troughs, Water Systems, and Stock tanks.....	6
Existing Fence and Corral Standards.....	7

Sunflower Memorandum of Understanding

This Memorandum of Understanding (MOU) is hereby made and entered into by and between the USDA, Forest Service, Tonto National Forest Mesa Ranger District, referred to as "Forest Service" and Horse Creek Farms, referred to as "Permittee". Once the terms of this document are met, a letter will be sent officially ending this MOU.

Background

Sunflower Allotment Management Plan (AMP) and new Term Grazing Permit was signed August 10, 2017. As required, authorized livestock must be placed on allotment in first year to validate Permit. The AMP outlines that specific improvements must be updated and constructed before livestock are authorized to graze. Validation of permit is waived until all terms and conditions of this MOU is completed, up to 2 years. Upon completion of MOU, Unit shall then move through process for livestock authorization. Livestock will be authorized to graze, one Unit at a time, until the entire Allotment is completed.

Allotment Management Plan

Permitted Use

Initial permitted use on Cottonwood East Unit is 50-75 head.

Table 1: Estimated initial Stocking numbers.

Unit	Pastures	Estimated Initial Stocking (cow/calf pairs)
Cottonwood East	Alder Creek North Cane Springs South Cane Springs	50-75

Grazing System

Cottonwood East pastures will be grazed in a rotational grazing system. This Units' initial stocking will not occur until all existing water developments and fences, identified below, are functional to Forest Service standards. Before validation, an inspection will be conducted by Forest Service personnel and permittee to evaluate range condition, water distribution and availability, and ensure improvements are functional.

Sunflower Memorandum of Understanding

Unit Grazing Implementation

Permittee Responsibilities

Permittee shall

- Complete reconstruction of existing improvements to standards provided;
- Complete construction of new improvements as instructed in subsequent permit modifications;
- Work with Forest Service to ensure all standards and guidelines are met for reconstruction and construction projects;
- Review all permit modifications for construction of new improvements.

Forest Service Responsibilities

Forest Service shall

- Complete spot check inspections of all existing improvements identified on following pages;
- Plan, oversee, and complete all related clearances for all projects outlined in MOU. This may include biological assessments, archeological clearances and any other clearances or consultations required under applicable laws and regulations;
- Prepare all letters or documents necessary for applicable clearances and send to Permittee;
- Preparation and approval of necessary grazing permit modifications or letters of authorization;
- Determine any issues associated with use of water systems such as water rights;
- Ensure all projects receive standards for installation;
- Inspect construction of new improvements.

Mutual Responsibilities

Both parties shall

- Meet regularly to provide updates, review progress, and establish any further information needed to continue moving forward.

Cottonwood East Unit

All existing improvements will be updated to following standards. A permit modification will authorize all existing improvements requiring with further standards, timelines, maps and other pertinent information (i.e. improvements requiring mechanized or motorized tools).

Timeline

All portions of this Unit is in the Four Peaks Wilderness. As of MOU's date of signature, timeline will start for maintenance and construction of range improvements. All improvements within this Unit are located within the Four Peaks Wilderness. Generally, existing improvements may not require further approvals. If existing improvements are found to need further approval, another letter will authorize and update this MOU. All improvements within the wilderness must not be maintained or constructed with mechanized or motorized equipment without further authorization. If heavy equipment is necessary, work with district range personnel to set up dates to completed required clearances (i.e. .

Sunflower Memorandum of Understanding

minimum tools analysis). Specific standards for improvements within the wilderness are updated on pages 6-7.

Required Existing Improvements

Once all Cottonwood East Unit Improvements listed are completed, livestock may be authorized, through a Bill of Collection. Improvements that require a mechanized or motorized (prohibited in wilderness) tools will require, at minimum, an archeology clearance and/or a minimum tools analysis before a permit modification for maintenance. These further approvals will require detailed information such as: length of time for use of prohibited tools, type of tools needed, access to improvements, etc.

Pasture	Improvements	Work to be completed
Cane Springs North	Three-Bar-Sunflower Fence R05326	
Cane Springs North	Cane Spring Tank 002207	Clean out and rebuild dam, spillway
Cane Springs North	Brown Cabin Spring 002234	
Cane Springs North	Cienega Spring 112243	
Cane Springs North	Talc Spring 002263	
Cane Springs North	Browns Cabin Corral 002337	
Cane Springs North	Browns Cabin Trap 002338	
Cane Springs South	Cane Springs Cabin 002186	
Cane Springs South	Cane Spring Corral 002186	
Cane Springs South	Cane Spring 002220	
Cane Springs South	Cane Spring Pipeline 002221	
Cane Springs South	Cane Spring Pasture 002276	
Cane Springs South	Cane Spring Trap #1 002277	
Cane Springs South	Cane Spring Water Lot 002278	
Cane Springs South	Cane Spring Trap #2 002279	
Cane Springs South	Cane Spring Pipe Corral 02335	
Alder Creek	Adams Camp Corral 002323	
Alder Creek	Alder Creek Trap 002213	

Sunflower Memorandum of Understanding

Existing Water Development Standards: Troughs, Water Systems, and Stock tanks

All water developments will be screen with vegetation, where possible, especially around hiking trails.

1. Spring source facilities should be adequately protected (i.e. buried or encased) or fenced and fences maintained to prevent livestock from getting into the source box, unless otherwise stated.
2. Head box lids or covers shall be in place to prevent dirt, rodents, or other refuse from entering head box. Head boxes will be constructed of concrete, metal, treated wood or other durable material. The start of the pipeline, inside the box, should be fitted with a tee to prevent debris from entering the pipe.
3. All outlet pipes and valves from head boxes should be functioning and must not leak.
4. All pipes should be large enough to carry the flow of the water development, generally no smaller than 1" for above ground HDPE pipe.
5. Troughs which become uneven due to settling should be reset and leveled, authorization may be needed.
6. Trough preferred construction material is concrete, where feasible. If trough is visible of a hiking trail, use concrete. If trough is outside of view of trails, painted metal troughs can be used. Paint will reflect colors of surrounding vegetation or soil.
7. Where applicable, trough overflow pipes must be kept clear. Overflow water should be piped away from troughs at least 50 feet away from trough. End of overflow pipe must be protected from livestock trampling.
8. Inlet and outlet pipe shall be protected by anchoring to trough with a single post next to a section of vertical pipe and a brace or pole supporting a section of horizontal pipe. Inlet and outlet pipeline should be buried to the extent possible for their protection.
9. Troughs will be equipped with a wildlife escape and access ramps from which wildlife can escape or drink from trough. Ramp must be fixed to one side of trough. See below for diagram.
10. Poles, posts, and trough framing materials used in water development construction will be maintained, repaired, or replaced as needed. Materials must not be taller than the trough and wires should not be placed over trough to allow access for watering avian species.
11. All above ground pipeline will be installed out of sight of public hiking trails. If above ground, install support structures, to keep pipe at gradient and prevent sagging. If within visibility of hiking trails, pipeline will be buried.
12. Pipelines with air and drain valves will be covered with fine screen to prevent rodents and dirt from entering pipeline. Screens must be replaced as needed.
13. Pipeline leaks will be repaired or damaged section repaired with materials similar to materials from construction.
14. Pipelines with valve cover boxes will be kept covered and repaired as needed.
15. Stock tanks: A Forest Service letter will authorize stock tank cleaning.
16. Water development components (e.g., rusted out troughs, broken sections of pipe, etc.) replaced during maintenance or reconstruction will be removed from Forest and properly disposed of.

Sunflower Memorandum of Understanding

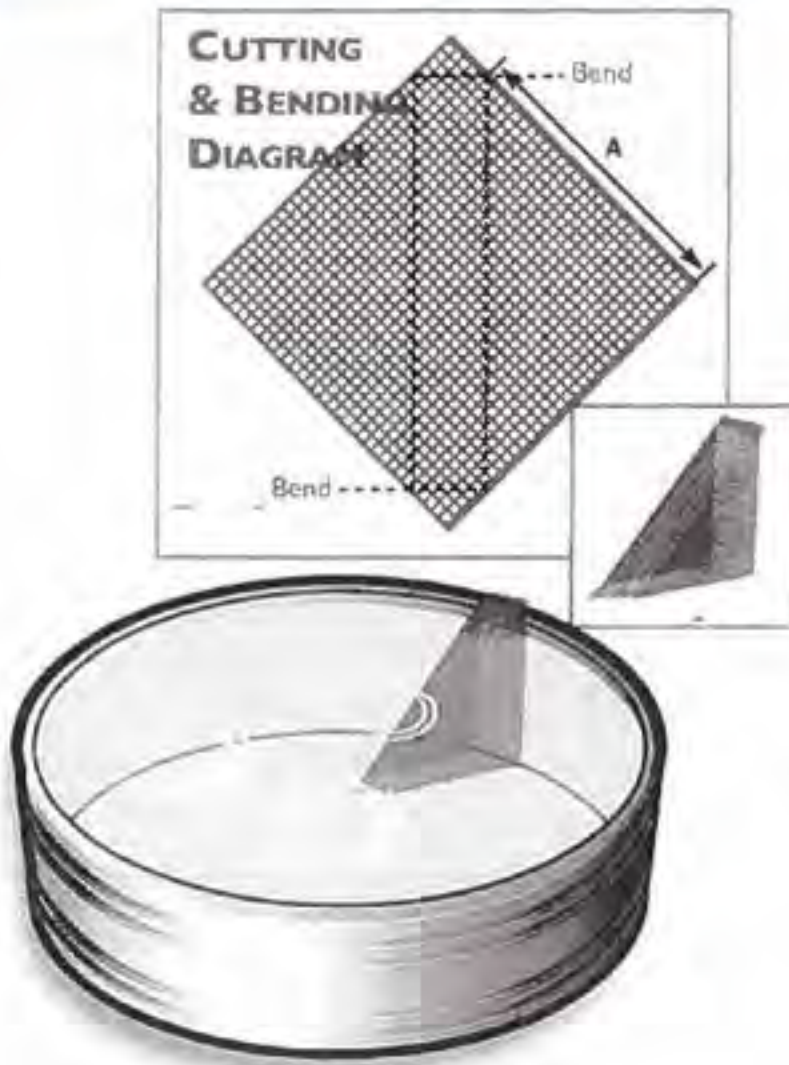
Existing Fence and Corral Standards

All fencing will be inspected at critical locations to ensure improvement will turn a cow.

1. All broken wire will be spliced and repaired in such a manner that tension on a wire is maintained. Wire splices will be made with similar wire used in construction. A 12 gauge wire is preferred. Fence should be upright and not angled due to poor tension.
2. Broken or rotten posts, broken braces and missing staples will be replaced as needed to fence.
3. Wires will be re-stretched as needed.
4. Broken or missing stays will be replaced as needed.
5. Top wire on range fences should be kept at 42 inches in height, and bottom wire should be smooth and 18 inches above ground. Standard range fences are 3 strands barbed wire and 1 smooth wire. Maintain existing condition of fence, until fence is compromised from splicing or tension. Fences are maintained at, or near as possible to, the standards required to turn livestock.
6. Staples should not be driven so deep into post that wire is compromised.
7. Wire gate tension should be sufficient to prevent sagging while maintaining functionality. Gate loops are constructed of smooth wire.
8. Trees which fall on fences will be cut and removed as needed. Broken wire will be spliced and re-stretched. Broken poles will be replaced.
9. Compromised sections of corrals will be replaced. Remove debris from corrals.
10. Components of range fences and corrals (e.g., wire, stays, t-posts, gates, etc.) replaced during maintenance or reconstruction will be removed from Forest and properly disposed of.
11. If fences or corrals are maintained within view of hiking trail, use wood posts or stays, where feasible. If outside of view, metal posts or stays can be used. If metal is used, paint tops of T-posts green.

Sunflower Memorandum of Understanding

Figure 1: Expanded metal grating (with 1/2 inch mesh) is an effective wildlife escape structure. Use the cutting diagram with the length matching the depth of the trough. The ramp is bent and the top corners bend over rim of trough. Attach with screws and bolts.



Sunflower Memorandum of Understanding

Figure 2: Expanded metal grating (with 1/2 inch mesh) is an effective wildlife escape structure. Use the cutting diagram with the length matching the depth of the rectangular trough. The ramp is bent and the top corners bend over rim of trough. Attach with screws and bolts.

