



United States
Department of
Agriculture

Forest Service

Date



Memorandum of Understanding

Sunflower Allotment

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:


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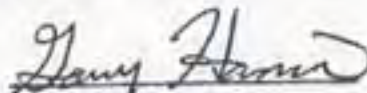
Date: 1/11/2018

Agreed to by:


Horse Creek Farms

Date: 12-16-17

Approved by:


Gary Hanna
Mesa District Ranger

Date: 12/22/2017

Table of Contents

Sunflower Memorandum of Understanding

Table of Contents

Background	3
Allotment Management Plan	3
Permitted Use	3
Grazing System	3
Unit Grazing Implementation	3
Permittee Responsibilities	3
Forest Service Responsibilities	4
Mutual Responsibilities	4
Dos S 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 Dos S Unit is 5-075 head. Dos S/ Desert Unit and Dos S pasture Unit are in non-use and will not be part of management.

Table 1: Estimated Initial Stocking numbers.

Unit	Pastures	Estimated Initial Stocking (cow/calf pairs)
Dos S	Maverick Picadilla Pine Creek	50 – 75

Grazing System

Dos S pastures will be grazed in a rotational grazing system. Dos S Unit Initial stocking will not occur until all existing water developments and fences are functional to Forest Service standards. All new developments or reconstruction of existing improvements will be constructed under additional permit modifications prior to livestock entering forest. Before validation of Dos S Unit, an inspection will be conducted by Forest Service personnel and permittee to evaluate range condition, water distribution and availability, and ensure improvements are functional.

Unit Grazing Implementation

Permittee Responsibilities

Permittee shall

Sunflower Memorandum of Understanding

- 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.

Dos S Unit

All existing improvements will be updated to following standards. New improvement fencing will be installed prior to livestock grazing in pasture. Remaining water developments shall be installed by dates listed below. A permit modification will authorize all new improvements with further standards, timelines, maps and other pertinent information.

Timeline

As of MOU's date of signature, timeline will start for maintenance and construction of range improvements. 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, in Picadilla pasture, must not be maintained or constructed with mechanized or motorized equipment without further authorization. Upon signature, work with district range personnel to set up dates to complete required clearances.

Initial Improvements

The following improvements will be maintained, reconstructed, or constructed within the first six months. Once all Dos S improvements listed are completed, livestock may be authorized Dos S Unit,

Sunflower Memorandum of Understanding

through a Bill of Collection. Improvements that require FS approvals will generally be on this time frame, but constraints may be outside of District Ranger control.

Unit-Pasture	Improvements	Work to be completed	FS approvals
Dos S-Maverick	Highway Tank #2215	Clean out and rebuild dam, spillway	Archeology Survey for tank and possibly access
Dos S-Maverick	Quartz Tank #2213	Clean out and rebuild dam, spillway	Archeology Survey for tank and possibly access
Dos S-Maverick	All pasture boundary fences	Repair to standards below. No blading or driving on fenceline.	None: If access is needed along fence, further clearances will be issued.
Dos S-Maverick	Brush Corral Spring #2252	Maintained or reconstructed to FS standards.	NA
Dos S-Pine Creek	Boulder Mountain Spring # 2225	Fix spring box to FS standards. Monitor water production. Pipeline maintenance will occur "Up to One Year".	NA
Dos S-Pine Creek	Meedlers seep #2246	Maintained or reconstructed to FS standards.	NA
Dos S-Pine Creek	Mud Springs #2259	Reconstruct to FS standards. FS has materials for project. Provide material needs to District.	NA
Dos S-Pine Creek	Tunnel Spring #2265	Maintained or reconstructed to FS standards. Ties into Mud Spring.	NA
Dos S-Pine Creek	Camp Creek Spring #2329	Inspect spring for further potential uses.	NA
Dos S-Picadilla	Mine mountain spring pipeline #2228	Maintained or reconstructed to FS standards, only portions in Picadilla pasture.	NA
Dos S-Picadilla	Mesquite Well water storage #2228	Maintained or reconstructed to FS standards.	NA
Dos S-Picadilla	Dos S pasture fence #2284	Maintained or reconstructed to FS standards.	NA
Dos S-Picadilla	Mine Mountain trap #2284	Maintained or reconstructed to FS standards.	NA
Dos S-Maverick	Haul Water	Located off Forest Road 3557, a storage tank, equal or less than 10,000 gallons, above ground pipe and a 300 gallon trough.	Biological and archeological clearances

Sunflower Memorandum of Understanding

Dos S – Picadilla	Mud Spring Corrals	Maintained or reconstructed to FS standards.	NA
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Additional Improvements

These improvements are not necessary for initial authorization of livestock. A proposed prescribed burn may also affect these improvements, and maintenance, reconstruction, or construction will not occur until after prescription.

Pasture	Improvements	Work to be completed	FS approvals
Dos S- Picadilla	Boulder Cabin Corral #2317	Maintained or reconstructed to FS standards.	NA
Dos S- Picadilla	Boulder Camp #2216	Maintained or reconstructed to FS standards.	NA
Dos S- Picadilla	Mud Spring extension	A storage tank, equal or less than 10,000 gallons	Biological and archeological Clearances
Dos S- Pine Creek	Mud Spring pipeline #2260	Maintained or reconstructed to FS standards.	NA
Dos S- Pine Creek	Camp Creek Spring #2329	Inspect spring for further potential uses.	NA
Dos S – Pine Creek	Boulder Pipeline #2225	Maintained or reconstructed to FS standards	NA
Dos S – Pine Creek	Cypress Trap #2296	Maintained or reconstructed to FS standards.	NA

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

For improvements that require soil disturbance may require further approvals.

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. 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.

Sunflower Memorandum of Understanding

7. 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.
8. 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.
9. 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.
10. All above ground pipeline should have support structures, to keep pipe at gradient and prevent sagging.
11. 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.
12. Pipeline leaks will be repaired or damaged section repaired with materials similar to materials from construction.
13. Pipelines with valve cover boxes will be kept covered and repaired as needed.
14. Stock tanks: A Forest Service letter will authorize stock tank cleaning.
15. 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.

Existing Fence and Corral Standards

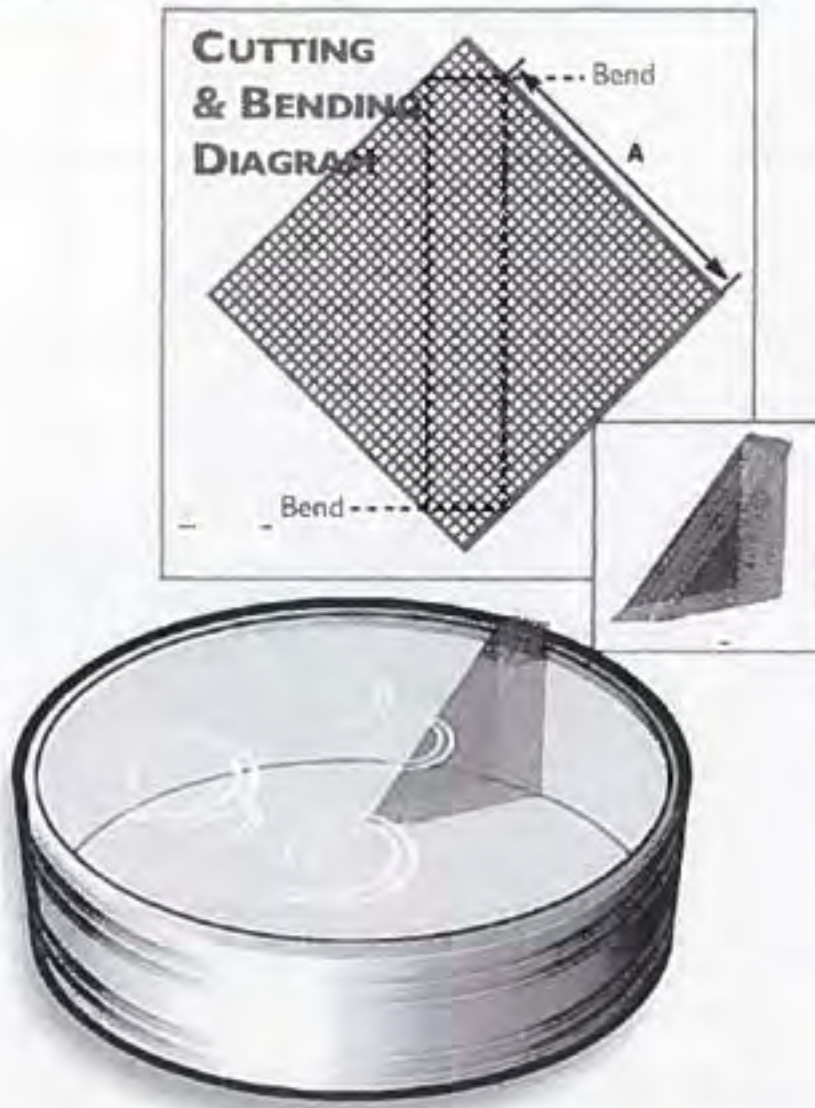
All fencing will be inspected at critical locations to ensure improvement will turn a cow.

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.

Sunflower Memorandum of Understanding

10. Metal 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.

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.

