

Tinny Springs Allotment Management Plan (AMP)

Flagstaff Ranger District

Coconino National Forest

Prepared by:  Date 8/28/14
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Agreed to/
Reviewed by:  Date 8/28/14
Zane Grey Cattle Co., LLC
Permittee/Ranch Manager

Approved by:  Date 8/28/14
Micah Grondin
Flagstaff Deputy District Ranger

I. Introduction

This Allotment Management Plan (AMP) is designed to update the existing 1990 AMP for the Tinny Springs Allotment. Only minor changes to the 1990 AMP were necessary based on an environmental analysis of grazing. A Decision Notice and Finding of No Significant Impact (DN/FONSI) for the Tinny Springs Allotment was signed by Alan S. Defler, Acting Forest Supervisor, Coconino National Forest, on February 21, 1990. As a result, this AMP includes management direction provided in the 1990 Allotment Management Plan as well as additional management actions required by the November 11, 1995 Decision Notice and Finding of No Significant Impact.

II. 1990 Tinny Springs Allotment Management Plan

A copy of the February 21, 1990 Allotment Management Plan for the Tinny Springs Allotment is attached. Allotment management direction provided in this document is relevant to the management and operation of the Tinny Springs Allotment unless modified by additional management actions required by the November, 1995 Decision Notice and Finding of No Significant Impact (see Section III).

III. Additional Allotment Management Direction

Additional management actions required by the November, 1995 Decision Notice and Finding of No Significant Impact include:

1. Allowable use within riparian areas is not to exceed 20% of the woody vegetation. Livestock will be controlled through management and/or fencing to allow for adequate establishment of vegetation, elimination of any overuse, and maintenance of at least three ate-classes of woody riparian plant species as per Forest Plan standards and guidelines.
2. Livestock grazing will be managed to limit consumption of aspen regeneration by livestock to 20% or less of current year's growth.
3. Livestock grazing will be controlled by management to allow adequate regeneration or grasses and forbs in mountain grassland areas (meadows).

MUD - TINNY SPRINGS
ALLOTMENT MANAGEMENT PLAN
MORMON LAKE RANGER DISTRICT
COCONINO NATIONAL FOREST
FLAGSTAFF, ARIZONA

Prepared by: Walter J. Tucker
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Range Conservationist

Date: 10/1/89

Submitted by: Raymond M. King
RAYMOND M. KING
District Ranger

Date: 2/16/90

Agreed to by: Lockett Ranches Inc. by Joe King
LOCKETT RANCHES INC.
Permittee

Date: 9/25/89

Agreed to by: Paul M. Webb, Perm. Rep.
ESTATE OF VIRGINIA WEBB
Permittee

Date: 10-10-89

Approved by: Alan S. Defler
ALAN S. DEFLER
Acting Forest Supervisor

Date: 2/21/90

Permitted by permit 2/21/90

MUD-TINNY SPRINGS ALLOTMENT
MANAGEMENT PLAN
1990 - 1999

PURPOSE AND NEED FOR PROPOSAL

The District proposes to revise the Mud-Tinny Springs Allotment Management Plan (AMP) in order to bring management into compliance with the Forest Plan. The Allotment is located to the southwest of Flagstaff, Arizona, and comprises a gross acreage of 70,000 acres of which 6,401 acres lie within the Mormon Lake bottom, making them unavailable to livestock during high water periods. The current permitted obligation is 1,232 yearlings, June 1 through October 31, for Lockett Ranches and 40 head of cows, June 1-October 31, for The Estate of Virginia Webb.

The current AMP was approved in 1985 and consisted of moderate intensity management using four main units and two holding pastures in a rest-rotation grazing system. The four main units are large and standards and guidelines from the Forest Plan are difficult if not impossible to attain under this AMP and system. In order to get on top of over-utilization problems in the riparian-mountain meadow complex, the system needs to be intensified.

Primary management areas within the Allotment are MA 3 - Ponderosa Pine and Mixed Conifer, Less than 40% Slopes; MA 9, Mountain Grassland; and MA 12, Riparian and Open Water. MA 3 comprises over 90% of the total allotment area. Of the 10% in MA 9 and 12, approximately 80% is in Mormon Lake. The allotment is summer range for all species of big game with competition for forage between livestock and elk a primary Issue/Concern. This competition is currently in balance but forage quantity and quality needs to be improved in order to maintain the balance. This is due to constantly increasing elk numbers and encroachment of overstory canopy which limits forage growth and development. Intensifying management through the use of range betterment funding (RBF) for structural improvement, and improvement of forage through sale area improvement plans associated with timber sales are the primary ways to maintain this balance.

There are also Threatened and Endangered (T&E) species concerns on this allotment with Potentilla multifoliolata, a R3 sensitive species. The allotment contains much suitable habitat for the species in the form of rocky bottomed, intermittent drainages occurring within basalt soils. Another R3 sensitive species, Hedeoma diffusum, which is tied to limestone derived soils does not occur on the allotment since the northern boundary of the allotment coincides with the limestone-basalt boundary and no significant opportunities exist for implementation of the Hedeoma management plan.

There is a need to update this AMP in order to start improving watershed condition towards satisfactory, reduce non-point source pollution, manage wildlife and livestock in a complementary manner, manage riparian-meadow areas and provide sustained-yield management of the range resource.

OBJECTIVES OF MANAGEMENT

1. Improve riparian conditions within those areas listed within the Riparian and Non-point Source Inventory for this Allotment and the Upper Lake Mary Watershed Condition Inventory.
2. Improve forage quality and quantity on the allotment to better accommodate the grazing ungulates which use the allotment for summer range.
3. Improve watershed condition through use of Best Management Practices (BMP's) which result in improved conditions within dry meadows located throughout the allotment, many of which are presently listed as non-point sources of pollution.
4. Continue the opportunity for a profitable ranching operation for the permittee.
5. Continue to develop the allotment through an approved range development program, while maintaining a positive present net value for the operation.
6. Improve regeneration for Potentilla multifoliolata, an R-3 sensitive species.
7. Initiate management that will reduce conflicts between livestock and private land-recreation areas-special use permits adjacent to Mormon Lake.

ISSUES AND CONCERNS (I/C's)

1. Unsatisfactory riparian habitat in 44 areas listed within both the Upper Lake Mary Watershed Condition Inventory and the Riparian and Non-Point Source Pollution Inventory for this allotment. (See Appendix for individual listing of these areas.)
2. The allotment area is presently producing sufficient forage to support two grazing ungulates (livestock and elk), but encroaching overstory canopy could jeopardize this balance in the future.
3. Non-point source pollution resulting from unsatisfactory watershed condition in those areas listed in the Non-Point Source Pollution Inventory for this allotment.

4. Private Landowner-Recreation Area-Special Use Permit/livestock conflicts within the Mormon Lake area consisting primarily of livestock intruding upon private land or into special use/recreation areas.
5. Management of Mormon Lake itself.

Additional I/C's considered by the I.D. Team and dropped or changed to an opportunity were the proposed management system (number of livestock, number and design of units and type of grazing intensity), fencing standards for additional unit fencing, wildlife cover requirements, black bear habitat/livestock conflicts, and timing of grazing use with critical wildlife needs (calving/fawning).

OPPORTUNITIES

1. Improve habitat for wildlife through improvement of forage quality and quantity.
2. Improve potential habitat for the Little Colorado River Spindace (Threatened species) through improvement of Railroad Springs, Sawmill Springs and Upper Hoxworth Spring .
3. Improve calving/fawning areas for elk and deer.
4. Enhance regeneration of Potentilla multifoliolata (a sensitive species).
5. Improve wildlife access to Mormon Lake through removal of four wire barbed wire fencing existing on the west side of the Lake. Removal will be made possible for some alternatives by proposed alignment of new unit fencing in this area.

MANAGEMENT OF RANGE

Initiate riparian and meadow protection measures, plus develop rest of allotment via additional structural development (fencing and water) and intensify management as development proceeds. This would include splitting of the existing 8 units into 14 smaller units in order to provide for more control of the time periods livestock are utilizing any one area. Structural development via 27.2 miles of two wire electric fencing, seven autogates and six cattleguards would be the primary range development required to accomplish this. A portion of this interior fencing can also be arranged in order to alleviate some conflicts involving grazing and private land-recreation areas-special use permits within the allotment adjacent to Mormon Lake. Existing barbed wire fencing of 2.2 miles would be removed. New waters consisting of five dirt tanks and four spring rehabilitations would also be planned. Make maximum use of forage enhancement opportunities generated through timber sale S.A.I. opportunities associated with several sales located within the allotment boundaries for livestock forage and wildlife habitat. Proceed with development work as

time and funds permit (both FS, Coop and Permittee). No additional livestock numbers would be anticipated during the course of this plan.

As new units are developed through splitting of the existing units, incorporate them into overall management of the allotment. A yearly plan will be worked up with Permittee Lockett which will best utilize available feed and/or water for that particular year. The overall goal will be to schedule grazing periods so that no one unit is grazed consistently at the same time each year. This schedule will be documented in the Permittee Instruction letter for that year. No 2200-19, Grazing System - Pasture Plan and Use Record will be prepared for the allotment. This is a result of several factors. Number one is that unit development will be affected by timber sale scheduling which changes constantly. It would be undesirable to construct a new unit fence immediately ahead of entrance to a sale. Also, as development of new units progresses over the allotment, the sequence of usable units will change due to the basic layout and size of the allotment. Unit scheduling will also depend on the previous years use patterns, precipitation patterns and other variables which cannot be anticipated at present. Yearly rest on a particular unit will not be planned but will be scheduled if a unit requires it in order to attain a particular goal or objective of the plan. Flexibility will be paramount in the course of this plan, with no set schedules or system in effect.

Utilization of available forage will be the primary criteria in determining when cattle are moved. It is anticipated that as more units are created utilization will begin to equalize with less of both high-extreme use and low to no use acreage. As this tendency materializes, no more than fifty per cent use should be made in any one unit. In order to attain this objective up to 100% of the allotment may be utilized each year.

Permittee Webb's livestock will kept within the Tinny Springs Allotment and rotated within the units developed there. Due to past problems of mixing classes of stock (yearlings and cows), his stock will not be mixed with the Lockett stock. The problem is one of steers riding cows excessively as came in heat. Permittee Webb's stock are no particular calving schedule and are likely to calve or come into heat at anytime during the summer season. In order to accomplish this, during the periods that both herds are being run in the Tinny Allotment the Webb stock will be rotated either ahead of or behind the Lockett livestock. A least one unit will be kept between the two classes of stock. This will again be determined yearly as Lockett's schedule is prepared and finalized and will be documented in the annual permittee instruction letter. Permittee Webb's stock will not be allowed to graze season long in any one unit as was previously the case.

RANGE DEVELOPMENT PROGRAM
PROJECT IMPLEMENTATION SCHEDULE

PRIORITY	TYPE OF PROJECT	LENGTH/NO.	COST	RESPONSIBILITY
1.	Wallace Unit Fence	3.3 miles 2 autogates	\$4600 \$2400	K-V Wallace RBRB
2.	Tinny Unit Fence	3.0 miles 1 autogate 2 cattleguards	\$4200 \$1200 \$4000	RBRB-Permittee RBRB-FS
	Special Use-Rec. Control Fence	5.0 miles 2 autogates 1 Cattleguard	\$6000 \$3500 \$2000	RBRB-Permittee RBRB-FS
3.	Spring Rehab. Sheep, Bootlegger and Thomas	3 springs	\$3000	K-V Wallace & Thomas Rdwd
4.	Camillo Tank Unit Fence	3.0 miles 1 cattleguard	\$4000 \$2000	RBRB-Permittee
	Coulter Unit Fence	2.7 miles 1 autogate	\$3900 \$1200	FS-RBRB-Mat. Perm.-Labor
5.	Antelope Unit Fence	2.8 miles 1 cattleguard	\$3400 \$2000	RBRB-Materials Permittee-labr
	Weimer Unit Fence	4.1 miles 1 autogate 1 cattleguard	\$5500 \$1200 \$2000	RBRB-Materials Permittee-labr
6.	Bar M Unit Fencing	5.6 miles 1 cattleguard	\$7500 \$2000	K-V and RBRB Permittee-labr
7.	Tinny Unit Water	4 waters	\$4500	FS-KV or RBRB Permittee
8.	Mormon Mountain Water	1 water	\$1500	Permittee
9.	Navajo Spring	1 spring	\$2000	K-V

Range Development Program-Continued

10.	Forage Development	7-8000 acres	\$96,000	FS-KV Smith, Thomas, Antelope Bar M, Cracker, Long, and Tie
11.	Relocation of ROW Fence @ SE corner of Mormon Lake	.5 mile 1 cattleguard	\$7500	FS-Recreation or Wildlife

MONITORING AND EVALUATION PROGRAM BY RESOURCE

1. Riparian Improvement - Improve overall condition plus age class distribution and density of woody riparian species. Measure by miles of improved stream condition and acres of improved riparian habitat monitored by degree of utilization of woody vegetation by livestock.
2. Forage quality and quantity - Improve forage plant composition and density. Measure by acres of improved range/habitat developed. This will be monitored through the amount of forage left for wildlife after livestock have left a unit. As more forage is developed it is anticipated that more forage will be left. At least 50 per cent of available forage will be left in order to satisfy the plan objectives.
3. Watershed Restoration - Stabilize and improve conditions within all areas of non-point source pollution over the allotment. Measure by acres of improved condition. Monitor through reduced bare soil, reduced plant pedalesting and increased plant density within the above areas.
4. Economic Concerns - Provide the opportunity for increased permittee income through increased livestock performance and maintenance of a positive net value while achieving intensified management and range development. Measure by continued maintenance of present term permit numbers. Monitor through need for reduced numbers as plan progresses.
5. Resolve conflict in a cost effective manner between private landowner-recreation area-special use permits and livestock presence within the allotment. Measure by professional evaluation/judgement of consent by affected parties to allow the district to proceed with the proposal. Monitor through numbers of complaints received by district personnel on a yearly basis as development program and intensified management of the livestock become a reality.