POISON SPRINGS

ALLOTMENT MANAGEMENT PLAN

TONTO BASIN RANGER DISTRICT

TONTO NATIONAL FOREST

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I. ALLOTMENT DESCRIPTION

The Poison Springs Allotment is located in Gila County, Arizona and lies approximately twelve miles east of Theodore Roosevelt Dam on the Tonto Basin Ranger District. It is bounded on the north by the Sierra Ancha Allotment, the northeast by the Dagger Allotment, the east by the Hicks Allotment, the south by the Pinto Creek and Havens Allotments, and the west by the Campaign and Bar V Bar Allotments. There are approximately 31275 acres within its boundaries, of which 26430 acres are considered as allowable capacity acreage.

A. Existing Management Units

The allotment consists of numerous pastures. This has allowed the development of approximately 6 separate grazing systems.

1. Lake and Blevins Units are characterized by highly dissected ridges with moderate to steep slopes running to an alluvial flood plain at the head of Salt River. Pinto Creek and the east end of Roosevelt Lake are major riparian areas. Vegetation is primarily desert scrub and interior chaparral with a mixture of salt cedar and mesquite in the Lake Unit. Range conditions vary from poor to very poor.

2. Bassett Unit is characterized by broad ridges with moderate to steep slopes. Vegetation is desert scrub with jojoba as the primary browse species. Range condition within this unit is generally poor to very poor.

3. Intake, Klondike and the Summit Units are characterized by highly dissected ridges with gentle to steep slope. Vegetation is desert scrub at lower to mid elevations and interior chaparral with some desert grassland inclusions at higher elevations. Range conditions vary from very poor to fair. The Salt River riparian area is the boundary for the north end of the unit. The Salt River Wilderness area comprises a major portion of the Summit Pasture.

4. Cottonwood and Braddock Units are characterized by highly dissected ridges with moderate to steep slopes until the lower elevations above the Salt River is reached where the terrain is gentle. Range condition classes are poor to very poor over much of the country. Desert scrub is the primary vegetative type with some limited desert grassland areas. Jojoba is the primary browse. Large acreages exist in the lower portions of this unit in the paloverde-bursage or creosote communities. The Salt River is the major riparian area and provides the southern boundary of the unit.

5. Black Mesa Unit is characterized by a broad gentle sloped mesa top with gentle slopes. The unit is moderate to steep slopes. Vegetation is desert scrub or desert grassland. Some of the units are primarily winter annual forbs and grasses; however, curly mesquite and sideoats grama are the main perennial grasses. Jojoba is the dominant browse species. Range condition classes are generally poor to very poor.

6. The Dry Creek Unit is characterized by gentle to steep slopes. There are five pastures within this unit. Vegetation varies from desert scrub to desert grassland type with some isolated pastures of interior chaparral. Plant vigor is generally low and overall range conditions classes are poor to very poor. The lower Coon Creek and a portion of the Salt River are major riparian areas. Dry Creek has some riparian vegetation established within the last 6 years, primarily cottonwood and willow.

B. Class of Livestock and Type of Operation

The livestock operation is a cow/calf/yearling operation. The allotment is stocked with primarily Brahma cross livestock, Brahma, Brangus, and Limousin bulls are currently being used on these cows. Yearlings are sold on the basis of weight, market conditions and weather conditions, with all yearlings off forest by April 30.

C. Permitted Numbers

The term permit _____, issued to (b) (6) [redacted] (b) (6) [redacted] on _____, lists:

340 Cattle 1/1-12/31
264 Yearlings 1/1-1/31
132 Yearlings 2/1-4/30

Yearlings are a fixed number.

D. Problems and Conflicts

The potential raising of Roosevelt Lake will create new problems for this allotment. First some range improvements will be inundated by the new lake level. New improvements will have to be constructed upslope of the present improvements. These fences and a corral have been identified for replacement utilizing Bureau of Reclamation funding.

Recreation will continue to increase on the allotment. Problems from vandalism and livestock/public user conflicts are anticipated to increase. Improvements should be located or constructed in manners which will reduce these conflicts.

Natural barriers between Hackberry and Chalk Creek Units may not be adequate to control livestock movement. If it proves over time to be an ineffective barrier, a fence will probably be required to control livestock movement.

Several roads on the allotment have been identified as needing to be closed for resource protection and public safety. The District road management program should identify, prioritize and schedule these roads to be closed. Such roads as the one to Black Mesa, the one along portions of the Dagger-Poison Springs fence line and the one to Salt River Peak are candidates for closure. The permittee and Forest Service personnel must continue to keep one another informed of road management needs and plans.

II. GOALS AND OBJECTIVES

A. Management Goals

The long range goals for management of the Poison Springs Allotment are:

1. Improve range condition to a satisfactory level and maintain in an upward trend.

2. Provide sufficient management of livestock so that their presence is not a limiting factor to achieving the productive potential of riparian areas.

3. Provide quality wilderness experience opportunities.

4. Provide forage for wildlife and livestock on a sustained yield basis.

5. Improve soil and watershed conditions to achieve high water quality.

6. Provide opportunity to improve permittee/public user/Forest Service relationships.

7. Provide opportunity to increase red meat production on a pound per acre basis.

8. Achieve at least 80 percent of the potential riparian overstory crown coverage and achieve at least 50 percent of the cottonwood-willow acres in Structural Type I (See Structural Type definition in Appendix).

9. Improve range condition to productive potential.

B. Management Objectives

1. Allow forage plants to periodically meet physiological growth requirements in order to improve plant vigor and total production.

2. Achieve improved visual quality, water quality and wildlife habitat where potential exists.

3. Provide tours, work projects, and volunteer opportunities to enhance public image of permittee/Forest Service.

4. Utilize only those range improvements necessary for proper livestock management within wilderness areas.

5. Allowable use of vegetation during grazed cycle.

   a. Browse-coffeeberry, false mesquite, etc. - 50%.

   b. Perennial grass - Upper Blevins, Summit, Baker, Upper Dry Creek, all of Black Mesa, Chalk Creek and Hackberry - 40% during growing season and 50% during non-growing season.

   c. Riparian areas - Coon Creek, Salt River and Pinto Creek - 20% use by volume of current years annual growth on cottonwood, willow, and sycamore.

III. MANAGEMENT SYSTEM

The grazing systems employed in this Management Plan are based upon the Santa Rita Grazing System. The Intake System and the Bassett System are based on deferred grazing or on seasonal use respectively. Refer to Grazing Chart R3-2200-19 that follows for rotation schedule.

A temporary permit for additional yearlings may be issued if the following environmental and growth conditions have occurred by December 15 of each year. The average prescipitation as measured at the Rock House Store, Pinto Creek Ranch, and at Tonto Basin Ranger Station, which has an official weather station, totals at least 4 1/2 inches for the time period from October 1 thru December 15. The minimum height of foxtail and red brome must measure an average of 5 inches in height by December 15. This growth will be an average of a pasture and not just in the most favorable areas. Growth will be measured in open areas as well as under mesquites to arrive at an average 5 inches.

We will also look at current utilization of pastures as another factor in the determination process for issuing the temporary permit.

The decision to graze yearlings and the number to be grazed would be determined by December 15 of each year.

Yearlings except replacements will be removed from the Forest by April 30 every year. Replacements will be carried until May 31 at which time they will be converted to adult cattle. Grazing use by replacement heifers for the month of May must be applied for by a supplemental grazing application.

IV. LIVESTOCK MANAGEMENT

Specific livestock management measures will be required to accomplish the range management objectives.

Salt and supplemental feeds will be located on feed and located in such a manner that grazing distribution is improved. Salting and supplemental feed stations will not be located at or near natural livestock concentration areas such as water sites, canyon bottoms, and riparian zones. Salt may be located on water only by written authorization of the Forest Officer in charge for such reasons as the trapping of livestock for shipping (for short periods of time), and to obtain utilization in certain areas where increased utilization is desired. Salt and supplemental feed locations should be relocated periodically to prevent trampling and trailing damage to the range resource. A salting map is included in the Appendix indicating areas in yellow that will not be salted unless the Forest Officer has given written approval.

V. RANGE DEVELOPMENT

A. Structural Development

	Development	Year of Completion	Priority	FS Cost	Permittee Cost
1.	Blevins Division Fence - 3 miles	1989	9	$ 5250	$ 6000
2.	Blevins Pipeline & 3 troughs 1¼ miles 3/4" Numex	1988	8	1800	1000
3.	Quail Springs Division Fence - 1¼ miles	1988	1	2200	2250
4.	Poison Springs Pipeline & 4 troughs - 1¼ miles 3/4" Numex	1989	7	2000	1000
5.	Dry Creek Division Fence - 1½ miles	1990	3	2650	3000
6.	Upper Coon Division Fence - 2 miles	1990	5	3500	4000
7.	Cougar Canyon Water Development - Storage tank, 3 troughs - 2 miles 1" galvanized pipe *includes helicopter	1991	6	13,700 *2	10,000 *1
8.	East Black Mesa Division Fence - 3 miles	1990	2	5250	8000
9.	West Black Mesa Division Fence - 1 mile	1989	2	1750	2500
10.	Black Mesa Spring & Pipeline, 2 storage and 2 troughs - 1¼ miles *includes helicopter	1990	4	8000 *2	5000
11.	Bassett Pipeline Extension - 1/2 mile	1990	10	700	500
11a.	Tanner/Braddock Division Fence - 1½ miles	1990	5	2650	3000

*1 FS to install storage tanks - includes permittee cost of pump.
*2 FS to fly materials to Black Mesa Spring and storage tank to Upper Cougar Canyon.

The following fences are needed and will be funded by the Bureau of Reclamation and as part of Plan 6 mitigation and will be constructed by the Forest Service.

12. EADS Division Fence - 1 3/4 miles.

13. Braddock Division Fence - 3 miles.

14. The Old Steer Pasture Corral will be re-located into the Bassett Unit since its present location will be inundated.

If in the event the Bureau of Reclamation does not fund any of the above projects the Forest will provide the materials and the permittee will construct the improvements as funds become available.

The materials noted for the above projects may change as new technology becomes available and savings can be generated. These projects are all subject to the availability of necessary funds and labor available to both the permittee and the Forest Service.

Projects are prioritized on a grazing system basis. Upon completion of improvements within each grazing system rotation of livestock will begin.

Annual review by the permittee and Forest Service of all projects may change priority of projects as needed.

B. Non-Structural Improvements

Black Mesa Burn - 940 acres @ $8.00/acre = $7520.

Cougar Canyon Burn - 476 acres @ $3.50/acre = $1666.

Hackberry Burn - 100 acres @ $9.00/acre = $900.

VI. MAINTENANCE OF RANGE IMPROVEMENTS

Maintenance responsibility is listed on the CPO-2200-5 in the Appendix of this plan.

All newly constructed and/or reconstructed developments that are not on this list are also the allotment permittee's maintenance responsibility.

VII. SCHEDULE AND PROCEDURE FOR MONITORING OBJECTIVES

A. Development and Follow-up Action

1988 - Install Improvements - Tonto Basin Ranger District and Permittee.

1989 - Install Improvements - Tonto Basin Ranger District and Permittee.

1990 - Install Improvements - Tonto Basin Ranger District and Permittee.

1990 - Monitor management units as they are implemented - Tonto Basin Ranger District and Permittee.

1991 - Monitor Allotment Management Plan with inspection of grazed units - Tonto Basin Ranger District and Permittee.

1992 - Conduct Production/Utilization Survey of grazed units - Tonto Basin Ranger District and Permittee.

1993 - Update Allotment Management Plan - Tonto Basin Ranger District and Permittee.

Update of Allotment Management Plan may occur prior to 1993 based upon changes identified by inspections, Production/Utilization Surveys, livestock management needs or marketing trends.

B. Annual Permittee Plan

An annual permittee plan will be written each year at grazing application time. The annual permittee plan will include the following items:

1. Current maintenance projects.
2. Pasture rotation schedule.
3. New construction.
4. Management practices.
5. Salting instructions.
6. Planned inspections and surveys.
7. Any deviation of the Management Plan.

C. Management Instructions

1. Any deviation from the Management Plan will only be done in consultation with the District Ranger and the Range Staff.
2. All livestock must be removed from a rested unit.

3. Acceptable livestock movement from one unit to another will be considered as two weeks prior and two weeks after removal date.

4. Salt, mineral, and supplemental feeds are to be located no less than one-quarter mile from water unless authorized by Forest Officer in writing (see Salting Map in Appendix).

APPENDIX

STRUCTURAL TYPE definition as used in Tonto Land Management Planning Process.

Structural Type V - No overstory canopy, lots of leaf area (seedlings, forbs, etc.) near ground level.

Structural Type IV - Poles and saplings with no defined overstory canopy.

Structural Type III - Same as Type IV.

Structural Type II - All of crown 9m (27 feet) above ground with no leafy area below this level. No seedlings, poles, or saplings able to survive due to lack of quality sunlight reaching the ground.

Structural Type I - Crown of 9m (27 feet) or higher that has been affected by a natural phenomenom (fires, floods, blown down, etc.) that has created holes in the canopy. These holes have allowed sunlight to reach the ground for the growth of seedlings, poles, and saplings as well as other brushy species.

STRUCTURAL TYPE I has well developed layers both above and below the 9m (27 feet) height that will maximize the diversity of a plant and wildlife species.

STRUCTURAL TYPE II lacks the well developed layers below the 9m (27 feet) level. Wildlife species confined to ground level or in the canopy few species associated with mid-level present.

STRUCTURAL TYPE III AND IV lacks well defined layers below the 9m (27 feet) level. Wildlife species primarily confined to those species utilizing this stage of growth for habitat requirements.

STRUCTURAL TYPE V lacks developed layers and is primarily utilized by wildlife species requiring low growing vegetation.

From paper presented at Tucson Symposium in 1977 by Dr. Robert Omhart (Ecological Study of Southwestern Riparian Habitats, Techniques and Data Collection).