

BASIN ALLOTMENT MANAGEMENT PLAN

CURRENT PERMIT AND NEPA HISTORY

The February 9, 1999 Environmental Assessment (EA) and the June 22, 1999 Decision Notice (DN) for an Allotment Management Plan is incorporated by reference into the Special Terms and Conditions. Subject to the above DN this portion of Part 3 constitutes the Allotment Management Plan for the Basin Allotment identified in Part 1. Since the Basin Allotment DN was signed, the Picnic Trap of the Murray Basin Allotment was combined administratively with the Basin Allotment. The division fence of the two traps was removed to make logical grazing areas. The combination of Hall Pasture, Trap #1 and Trap #2 is currently referred to as Picnic Hill Pasture.

DESCRIPTION OF THE ALLOTMENT

The Basin Allotment is located three miles southeast of Springerville, Arizona. The allotment contains 1,005 gross acres. The elevation ranges from approximately 7,080 to 7,600 feet. The allotment is primarily an open basin with the eastern and southern portion of the allotment bounded by a basalt rim. Rim slopes are covered with pinyon pine and one-seed juniper. Blue grama dominates the under-story and open grasslands. Other associated species include sand dropseed, poverty three-awn, mat and ring muhly, wild buckwheat, snakeweed, winterfat and fringed sagebrush in varying amounts. Shrubs species include cliffrose, skunkbush sumac, rabbitbrush, and wax currant.

GOALS AND OBJECTIVES

- a. Balance permitted livestock use with allotment capacity (page 2 of EA)
- b. Establish utilization standards and season of use that will provide for the physiological needs of the vegetation (page 4 of DN)
- c. Improve vegetation and range condition (page 10 of EA)
- d. Improve watershed and soil condition (page 18 of EA)

MANAGEMENT STRATEGY

The livestock operation will consist of a single herd operating within a two pasture rotational grazing system under winter use only. The new number of livestock and season of use are:

- The permitted number of livestock is 27 cow/calf pairs or 41 AUMs
- The season of use is January 1 to February 15.

The livestock operation on the Basin Allotment will consist of a single cowherd. Livestock will be trucked from high elevation summer pasture on the Greens Peak Allotment or state land leases, to the permittee's ranch headquarters, and placed on the allotment according to the scheduled grazing rotation. Livestock will be rotated through the two pastures and two traps scheduled in the rotation and will be trailed off the allotment to the permittee's other winter grazing units located north of the Forest boundary.

The allotment is grazed with two pastures under a rotational grazing system. The two pastures are Picnic Hill and Basin. The first pasture entered will be rotated within the grazing schedule every year as necessary. The opportunity to rest a pasture is an option and will be evaluated annually. A determination to rest a pasture will be made based on the existing resource needs at that time.

MITIGATION MEASURES

- 1) Mitigation measures designed to improve watershed and riparian conditions on the allotment are as follows (page 70 of EA):
 - a. Reductions in livestock numbers and season of use and implementation of grazing utilization standards will result in improved upland conditions;
 - b. Construction of erosion control structures in Picnic Creek drainage and associated incised drainages will help reduce sediment flow into Nutrioso Creek;
 - c. Woodland treatments and prescribed burning projects will improve watershed and range conditions.

- 2) Best Management Practices that apply to the activities listed above to maintain/improve water quality and prevent accelerated soil erosion will be in affect (Appendix C of EA.).

RANGE DEVELOPMENT CONSTRUCTION/RECONSTRUCTION

To fully implement this Allotment Management Plan, structural developments will be constructed to improve the distribution of livestock, reduce forage use in key areas and improve existing resource conditions (Table 1). Existing range developments throughout the allotment will be reconstructed as necessary (Table 2). All fence construction and reconstruction will utilize smooth wire on the top and bottom strands.

Table 1. Basin Allotment planned range developments – construction/reconstruction (page 70 of EA).

DEVELOPMENT	UNITS	LOCATION	CONSTRUCTION RESPONSIBILITY	STATUS	MAINTENANCE RESPONSIBILITY
Fence (new)	0.25 mi	Between Basin & Picnic Allotments	USFS materials/ Permittee labor	<i>Completed</i> 02/30/2001 # 061066	Permittee
Fence (new)	0.5 mi	Forest boundary, Sec 13, T.8N., R.29E.	USFS materials/ Permittee labor	As funding permits	Permittee
Fence (reconstruct)	0.25 mi	Allotment boundary fence #1121 between Picnic and Murray Basin Allotments, Sec 13, T.8N., R.29E.	USFS materials/ Permittee labor	<i>Is now ROW fence</i>	Permittee
Drinker (new)	1	Sec 13, T.8N., R.29E.	USFS materials/ Permittee labor	<i>Completed</i> 01/17/2001	Permittee
Picnic Spring collection system (reconstruct)	1	Sec.13, T.8N, R29E	USFS materials, equipment & labor	<i>Completed</i> 01/17/2001	Permittee
Woodland vegetation treatment (mechanical removal)	175 ac	Areas being invaded by P/J – to be determined	USFS materials, equipment & labor	As funding permits	USFS

Prescribed Burning 10-15 year intervals	to be determined	USFS materials, equipment & labor	As funding permits	USFS
Erosion control structures (new)	Picnic Creek drainage	USFS materials, equipment & labor	As funding permits	USFS

MONITORING PLAN SUMMARY

Implementation Monitoring- Insure that the actions described in the Decision document are implemented as designed and scheduled, and are in compliance with the Forest plan standards and guidelines

- Planning-Decision Implementation Schedule
- Management- AMP, AOI, Actual Use

Effectiveness Monitoring- To determine if the Forest plan standards and guidelines, grazing prescriptions, and Allotment Management Plan are effective in accomplishing the planned objectives.

- Grazing Utilization-Upland Herbaceous 40%, Shrubs 25%
- TES Monitoring

Validation Monitoring- To determine if management actions are resolving the issues identified in the Environmental Analysis (EA)

- Composition and density-herbaceous and shrub upland vegetation
- Ground Cover/Watershed Stabilization

BEST MANAGEMENT PRACTICES (BMP's)

A handbook was prepared to assist the owner/operator of a Rangeland Livestock Grazing Activity with the selection of best management practices (BMPs) for voluntary compliance with A.R.S. 49-202.01. This draft publication was developed by the NPS Technical Advisory Committee Group on Livestock Grazing Activities. The following are excerpts from this handbook that relate directly to the allotment management plans developed on the Forest.

1. The goal of maintaining or improving the quality of water should be included in management plans for livestock grazing activities. While the goal of the Clean Water Act is to improve water quality, some waters have acceptable quality which should be maintained.
2. The location, timing and intensity of livestock grazing activities should be controlled with objectives of achieving soil cover to prevent accelerated erosion and to protect water quality.

3. Structural range improvements, such as fences, water developments, trails and corrals, should be planned, constructed and utilized in a manner to enhance or maintain water quality.
4. Land treatments to manage vegetation or practices to reduce erosion should be planned, implemented and maintained to minimize adverse impacts on water quality.
5. Livestock Management Activities, such as parasite control, feeding and salting, should be done in a manner to protect water quality.

Specific activities to maintain or improve water quality for the Milligan Valley Grazing Allotments follow.

1. **Brush or woodland management treatments**, if implemented to improve soil quality, shall be accomplished in a manner that will retain at least 5 tons/acre of treatment generated large woody debris (3 inch and larger) dispersed evenly across the site. Ground cover within 2 years of treatment shall be at or above the tolerance ground cover needed to protect soil productivity and hydrologic function. **TES map unit 503, 516, 591, 592 and 523** require 5 to 7 tons per acre of residual material to maintain hydrologic function of the soil. Grazing management or maintenance measure will be applied to enhance the success of the treatment. This may involve 2 growing seasons of rest to let herbaceous cover become established. Use of temporary fencing or modified rotation of livestock may be required. Utilize BMP implementation form for mechanical treatment to evaluate land treatments with regards to potential water quality impact.
2. **Prescribed fire treatments** should be applied only under conditions that the intensity and rate of spread of the fire are controlled. To protect soil productivity, fire intensity should be low to moderate to prevent loss of soil nutrients, organic matter and the alteration of soil physical properties, such as structure and pores, that would reduce infiltration of water into the soil. Utilize BMP implementation and effectiveness form for prescribed fire to evaluate the treatment with regards to potential water quality impacts.
3. **Seeding projects** should be implemented in areas where native seed is scarce, or in areas where eroding upland and riparian areas are contributing directly to sedimentation in stream channels, especially in areas used as filter strips to mitigate other management practices. Provide a period of protection from grazing to promote establishment of herbaceous plants.
4. **Planned grazing systems** shall be implemented to maintain or improve plant cover for the purpose of maintaining existing plant cover while properly using the forage available, increasing efficiency by uniformly using all suitable parts of each grazing unit, reducing erosion and improve water quality, insuring a supply of forage throughout the grazing season, increasing production with improved quality of forage, enhancing wildlife habitat, promoting flexibility in the grazing program and buffer the adverse effects of drought. Proper stocking and improved distribution of cattle will be major considerations for evaluating effects of implementing a system.
5. **Grazing** shall be at an **intensity** that will maintain enough cover to protect the soil or improve the quantity and quality of desirable vegetation. Allowable use will be adjusted by range condition class on fully and potentially capable land. Key grazing areas will be monitored to determine when cattle should

be moved to prevent over use.

6. **Utilize salt** to improve livestock distribution. Salt a reasonable distance away from water or natural congregating areas such as roads, trails, and saddles in hills, and avoid key areas. Move salt when distribution objectives are not being met or to correct localized overuse problems.
7. **Access roads** for the maintenance of grazing improvements shall be engineered to facilitate reasonable control and disposal of water, to control erosion, and make the best possible use of topographical features, where possible. Access roads shall not be placed along or parallel to the stream channel within the streamside management zone. Crossing shall be perpendicular to the stream and the number of crossings should be minimized. Road gradients should not exceed 10 percent except for short lengths where more acceptable design criteria are prevented. All cuts and fills will be stabilized. Drainage structures will be engineered to provide adequate surface drainage to meet site specific criteria and runoff conditions. Culvert, bridges or grade dips for water management shall be provided at all natural drainage ways. Road side ditches shall be engineered to provide surface drainage for the roadway and deep enough to serve as outlets for subsurface drainage. Drainage channels shall be sited on stable grades or protected with structures or linings for stability. Rolling dips or water bars shall be incorporated into design criteria to control surface runoff. These should be maintained periodically to ensure proper function. Structures shall be placed on all water bar or rolling dip outlets to trap sediment and slow erosive force of water. Lead-out ditches shall not be placed directly into water courses. Water quality shall be protected during and after construction by erosion-control facilities and maintenance. Filter strips, sediment and water control basins, as well as other accepted conservation practices shall be used and maintained as needed.

Grazing management strategy for Implementing the Clean Water Act

In 1972, the Federal Water Pollution Control Act (FWPCA) Amendments became law. The Clean Water Act (CWA) amended the original document with further modifications occurring in the Reauthorization Act of 1987. Together, these documents provide the authority to manage water quality on National Forest Service (NFS) lands with the objective to restore and maintain the chemical, physical and biological integrity of the nation's waters. Section 319 of the amended CWA provides the authority for each state to prepare a nonpoint source (NPS) water quality management program that includes cooperation with Federal agencies. As part of that cooperation that states have recognized the Forest Service as a designated management agency for NPS water quality management. They have recognized our Integrated Resource Management (IRM) process for developing Best Management Practices (BMPs) to control NPS water pollution on NFS lands.

In addition, the Arizona Department of Environmental Quality, Nonpoint Source Unit, will provide water quality certification for fully finalized projects when the following information has been submitted for their review:

1. A detailed map(s) showing exact location of the project(s).
2. A precise description of the activity(s) that will be occurring on the project(s).
3. A water quality management plan containing the implementation strategy used to comply with Surface Water Quality Standards. The water quality management plan shall include:

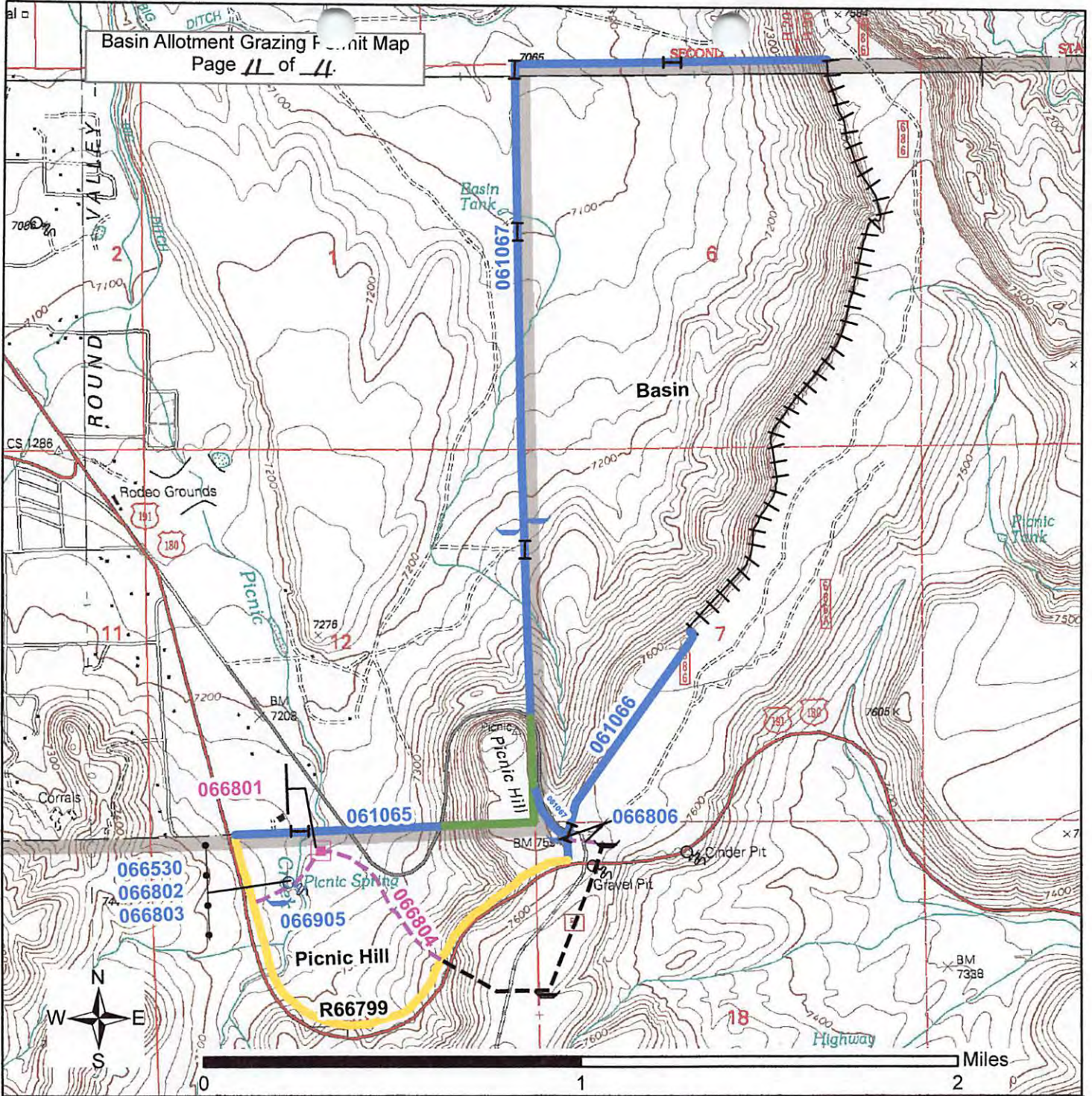
- An identification of rivers, streams or water bodies which will, with reasonable probability, be impacted by the activity(s).
- The management practices (BMPs/Guidance practices) to be implemented by the owner/operator to maintain compliance with Surface Water Quality Standards.
- A monitoring plan to document implementation of the Water Quality Management Plan and Surface Water Quality Standards.
- Connectivity to stream segments identified in the Arizona Water Quality Assessment, 1996 shall be established. Allotments with grazing activities that affect stream segments that are considered non-attaining of water quality standards for designated uses by the State shall be considered a high priority for completion.

A BMP is a practice or combination of practices that are determined (by a State or designated area-wide planning agency) through problem assessment, examination of alternative practices, and appropriate public participation to be the most effective, practicable (including technological, economic, and institutional considerations) means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals.

Monitoring of BMPs

Monitoring the condition of land, water, vegetation or compliance with management plans for a project will meet the intent of the water quality certification rules. The following are examples of monitoring currently used and its type (I=Implementation, E=Effectiveness):

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| Production/utilization studies (I, E) | Paced Transects (E) |
| Permittee compliance, adhering to AOP (I) | Ocular ground cover estimates (E) |
| Road maintenance inspections (I, E) | Soil condition evaluations (E) |
| Parker 3-Step monitoring (E) | Daubenmire transects (E) |
| Proper Function Condition evaluations at specified intervals (E) | BMP implementation and effectiveness monitoring worksheets from R-3 (I, E) |



Legend

- H Gates
- Well
- ⌋ Trough
- Spring
- Pipeline
- Forest Boundary

Apache-Sitgreaves National Forests Springerville Ranger District Range Improvement Map

Basin Allotment

IMPROVEMENT MAINTENANCE

- Private Land
- Hall Ranches, L.L.C.
- ADOT ROW Fence
- Basin, Water Canyon, Murray Basin, and Picnic Permittees
- Natural Barrier

This map is part of Grazing Permit No. R06062
issued to Hall Ranches, L.L.C.
on 04/23/2020 by Rob Lever
and shows the Basin Allotment.