



United States
Department of
Agriculture

Forest
Service

Mormon Lake
Ranger District

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Red Hill Corporation
c/o Duane Coleman, Manager
Norman Honani, Manager
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Winslow, AZ 86047

Dear Duane and Norman:

These are your 2007 Annual Operating Instructions (AOI) for the Pickett Lake and Padre Canyon Allotments. These Annual Instructions are a part of your term grazing permit as indicated in Part Two. In addition, this letter is to document actions that need to be taken this year to keep the Forest Service and these allotments in compliance with previous commitments from environmental assessments, allotment management plans and guidelines and recommendations for rare wildlife and plant species, including those that are threatened or endangered.

Pickett Lake and Padre Canyon Allotments Area Description

The Pickett Lake and Padre Canyon Allotments consists of 55,807 acres southeast of Flagstaff, Arizona. These acres lie within Mormon Lake Ranger District of the Coconino National Forest. The allotment runs from the upper end of Upper Lake Mary and Mormon Lake across Forest Highway 3 east to the forest boundary. The grazing system is an 8-12 pasture deferred rest rotation system.

The western portion of the allotment is a ponderosa pine community at an elevation of approximately 7100'. The central portion of the allotment is transition grassland with sparse ponderosa pine and pinyon-juniper throughout. Going east, the allotment has pinyon-juniper, which extends from Anderson Mesa to the forest boundary. Riparian and wetland areas are both man made lakes, such as Ashurst Lake, and Coconino Dam, as well as various types of seasonal, permanent, and semi-permanent wetlands such as Boot Lake, Pickett, Post, Als, Potato, Deep, Breezy, Indian, Long, McDermit, Ducknest, and Perry Lake. These lakes have riparian values, however, in periods of extended drought the water and riparian vegetation may dry up.

Springs on the allotments include: Ashurst, Mormon Canyon, Boot, and Elliot. Ashurst Spring is fenced from cattle and elk. Mormon Canyon Spring is dry and does not have any riparian vegetation. Boot Spring, Billy Back and Elliot Spring have sedges, rushes and other riparian vegetation. Steep and rocky terrain excludes cattle grazing from Elliot Spring; however, livestock have grazed Boot and Billy Back Spring.

The allotment contains the following Land Management Plan Management Areas:



- MA 3-Ponderosa Pine and Mixed Conifer
- MA 4-Ponderosa Pine on greater than 40%
- MA 6-Unsuitable Timber Land
- MA 7-Pinyon Juniper on less than 40% slopes
- MA 8-Pinyon Juniper on greater than 40% slopes
- MA 9-Mountain Grassland
- MA 10-Transition Grassland
- MA 12-Riparian

The Pickett Lake Allotment occurs in three 5th code watersheds. The following table is a summary of number of total acres within each 5th code watershed and acres of the allotment, which occur within each watershed on the Coconino National Forest.

5 th Code Watershed (Acres)	Allotment (Acres)	% of Allotment Within Watershed
Canyon Diablo (223,885)	45,553	82
Mormon Lake (25,385)	1,052	2
Lake Mary (97,203)	9,201	16

The following is a list of Best Management Practices (BMP's) developed for these Annual Operating Instructions.

- to protect resource values, uses, and maintenance of soil productivity, stability and water quality.
- •Monitor ground conditions before and during construction activities to avoid wet ground conditions that can negatively affect soil condition and water quality.
- The following grazing practices were selected for the Pickett Lake and Padre Canyon Allotments through the integrated resource management process and would also apply to all cattle grazing alternatives.
- Grazing systems are alternately rested and grazed in a planned sequence. Cattle rotate in a planned grazing system that alternates rest and graze periods throughout a given year and from year to year. An 8 to 12 pasture rest-rotation grazing meets this practice.
- Grazing at a level that would maintain enough cover to protect the soils and maintain or improve the quantity and quality of desired vegetation. This practice would be applied through the utilization guidelines for the action alternatives.
- Provide watering facilities for animals at selected locations. The new pipeline and drinker construction in Alternatives 3 and 4 is intended to increase distribution of wildlife and livestock.
- Fencing to improve cattle management, control access, prevent soil loss, and improve water quality. Fencing specifics are described under each action alternative. Existing and proposed fencing is improving cattle and wildlife management and controlling access. Fencing in the action alternatives was not designed to prevent soil loss and improve water quality.

Your term and temporary grazing permit information along with your 2007 grazing schedule is listed below:

<u>Permittee Name</u>	<u>Permit Type</u>	<u>Season</u>	<u>Permitted No.</u>
NA Properties, Inc.	Term	6/1-9/30	913 cows/calves

<u>Pasture Name</u>	<u>Use Dates</u>	<u>Total Number</u>
Railroad	6/1-7/15	520
Ashurst	7/16-8/21	520
Ducknest	8/22-9/22	520
Boot/Breezy	9/23-10/13	520
Trailing/Shipping	10/14-10/15	520

Padre Canyon/Elliot/Morgan	yearlong rest, unless needed.
Woodland	yearlong rest

The pasture move dates shown above are an estimate, and may need to be changed on the basis of actual range conditions. Due to current drought conditions it is vital to monitor actual conditions closely, and notify the Forest Service promptly if it appears that livestock will need to be moved sooner or later than estimated above. Grazing dates will be adjusted for this year's soil and vegetation readiness. Field checks in key forage areas such as meadows and riparian areas will be made prior to scheduled entry dates. Dates may be adjusted only with prior approval of the Forest Officer.

To facilitate livestock moves, gates may be opened two days prior to the scheduled move date only when moving into an adjacent pasture. Gates must be closed and grazed pasture entirely cleaned of livestock no later than five days following the scheduled move date. Grazed pastures must be kept clean of livestock following the pasture move.

Salt or mineral supplement locations should be rotated annually and avoid areas where cattle concentrations could cause excessive vegetation trampling, soil loss or disturbance to sensitive species or habitats. These areas would include habitats that support Mexican spotted owls, northern goshawks, rare plants, riparian vegetation, meadows or locations closer than 1/4 mile from a water source. The enclosed map shows the general location of these areas that are not obvious on the ground. This map does not include all obvious sensitive areas like all meadows, riparian areas or water sources.

No prairie dog control (i.e., poisoning or shooting) is allowed in association with this permit.

Monitoring will be conducted in partnership with the permittee on a regular basis during the grazing season and will be used to develop next year's Annual Operating Instructions that state when livestock are to be moved and how grazing patterns are to be changed during the grazing season. It is important this year for you to help us with monitoring of your grazing permit. With present and future downsizing in the Forest range program your assistance in monitoring will

become increasingly more important. This monitoring generally includes compliance with your annual operating, livestock utilization and overall range condition and trends.

The allowable level of total utilization on herbaceous and woody vegetation is 35% maximum and 35% average use in ponderosa pine (including pine/oak), aspen and mixed conifer. This will ensure proper protection and management of resources on these allotments.

Adjustments in numbers, rotation schedule or season of use will be made if utilization guidelines are exceeded. The option to return livestock to a pasture that has received adequate plant regrowth will be considered if all resource objections can be met. To achieve the desired allowable use, it is important to have proper livestock distribution.

No new range improvements are scheduled for this year on these allotments.

Refer to the attached map for the areas that are excluded from cattle grazing during the grazing season. All fences must be maintained to ensure cattle stay out of these areas. You must monitor these areas to ensure cattle do not enter them. If cattle enter these sites immediate action must be taken to remove them.

AOI's are appealable and subject to review under 36 CFR 251.

If you have any questions please call Mike Hannemann at 526-0866.

Sincerely,

Gene Waldrip
District Ranger

I have reviewed and agree with these Annual Operating Instructions.

Duane Coleman

Planned Monitoring

Monitoring would occur under all action alternatives during the permit term and includes the following activities: permit compliance, allotment inspections, range readiness, forage production, rangeland utilization, condition and trend, soil condition, noxious weeds, and threatened and endangered species. Under Alternative 2 (No Action), condition and trend and wildlife utilization would continue to be monitored, if funding is available. Monitoring frequency varies by each activity and may be accomplished by either the permittee and/or Forest Service personnel.

Permit Compliance: Throughout each grazing season Forest Service personnel would monitor to determine accomplishments of the permit terms and conditions, the AMP, and the AOI.

Allotment Inspections: Allotment inspections are a written summary done each fall by Forest Service personnel to document compliance monitoring and to provide an overall history of that year's grazing. This document may include weather history, the year's success, problems, improvement suggestions for the future, and a monitoring summary.

Range Readiness: Each spring, Forest Service personnel and/or the grazing permittee would assess range readiness prior to cattle coming on the allotment to determine if vegetative conditions are ready for cattle grazing. The range is generally ready for grazing when cool season grasses are leafed out, forbs are in bloom, and brush and aspen are leafed out. These characteristics indicate the growing season has progressed far enough to replenish root reserves so that grazing will not seriously impact these forage plants.

Forage Production: Production surveys for these allotments would be done every 9 to 13 years. Methods used for these surveys would use the best available methods at that time. These values would be used as tools to manage this allotment, but will not be the sole measurement to establish carrying capacity. The most recent forage production surveys were done as part of this analysis in 2001. The next survey is scheduled to occur after 2010.

Rangeland Utilization: Long-term condition and trend monitoring is the primary standard for monitoring of this cattle grazing management system. Utilization is used as a tool to understand and achieve the goals of long-term management. Utilization guidelines are intended to indicate a level of use or desired stocking rates to be achieved over a period of years.

The definition of utilization and seasonal utilization come from standard protocols established by the Society of Rangeland Management and the new guidelines established by Region 3 Regional Forester [PRD 92]. The following definitions and procedures for utilization were taken and adapted to fit this project.

Utilization is the proportion or degree of current year's forage production that is consumed or destroyed by animals (including insects). It is a comparison of the amount of herbage left compared with the amount of herbage produced during the year. Utilization is measured at the end of the growing season when the total annual production can be accounted for and the effects of grazing in the whole management unit can be assessed. Utilization guidelines are intended to indicate a level of use or desired stocking rate to be achieved over a period of years.

Utilization measurements will be taken in key areas which reflect grazing effects within an entire pasture. One key area would be established within each large pasture, at existing long-term monitoring sites if possible, to represent overall pasture utilization. Utilization guidelines are not intended as inflexible limits. Utilization measurements can indicate the need for management changes prior to this need being identified through long-term monitoring. Utilization data would not be used alone, but would be used along with climate and condition/trend data, to set stocking levels and pasture rotations for future years.

Cattle would move from one pasture to another when seasonal utilization in a pasture approaches a “moderate” level. For Alternatives 1 and 3 (35 percent utilization guideline), moderate seasonal utilization would be approximately 21-50 percent. For Alternative 4 (20 percent utilization guideline), moderate seasonal utilization would be approximately 10-35 percent. Moderate seasonal utilization is an approximate value because it takes into account any additional growth which might occur later that year and considers season of use, wildlife use, weather conditions, availability of forage, and water in pastures. This moderate seasonal utilization level leaves residual cover for wildlife and soils and provides for long term health of the grazed plants.

If monitoring shows utilization rates exceed the utilization guideline in a pasture in a given year, the grazing schedule and/or cattle numbers would be adjusted the following year so the utilization guidelines are not exceeded again. If utilization is exceeded after these adjustments are made, then the grazing management system would be changed to ensure this does not happen in the future.

Condition and Trend: Watershed and vegetative condition and trend monitoring will help determine the effectiveness of the allotment management plan, and long-term range and watershed trends.

Parker Three-Step and paced transect monitoring points were established throughout this allotment in the 1950-60s. These transects are one of best historic records of range condition and trend. The photo points and vegetative ground cover data show how the site has changed over time. Canopy cover and frequency plots were placed with the Parker Three-Step transects in 2001 to add to this historic data.

Ocular plant canopy cover 0.10-acre plots were used to compare existing conditions with potential and desired vegetative community conditions. Over time, these plots will show how canopy cover changes. Canopy cover will provide an indication of how plants are growing, assuming that if they are getting bigger and occupying more space, then they are doing well and can be a relative gauge of vigor.

Frequency and ground cover data were collected using the widely accepted plant frequency method (University of Arizona, Extension Report 9043, 1997). These plots will monitor trends in plant species abundance, plant species distribution and ground cover. This will provide information on plant composition and additional information on regeneration.

These transects will be read at least every 10 years by Forest Service personnel. These plots will

help determine the effectiveness of current management.

Precipitation: Precipitation is currently recorded at the Flagstaff National Weather Service Office at Bellemont. Precipitation data may be recorded within or near the allotments for more localized information. Precipitation data may be recorded throughout the year and summarized in the annual inspection. This data assists managers with forage utilization and production data collection.

Soil and Riparian Condition: The Intergovernmental Agreement between the Forest Service and the State of Arizona that controls water quality and the Clean Water Act requires implementation and effectiveness monitoring. The objectives of monitoring are to: (1) collect data sufficient to evaluate effects of management activities on soil and water resources; and (2) support changes in management activities to protect soil and water quality. Monitoring will help determine how successfully managers are implementing guidance practices and how effectively those practices are protecting soil and water quality. The current and proposed cattle grazing system incorporates best management practices (BMPs) and grazing practices (GPs) and constitutes compliance with Arizona State and Federal Water Quality Standards. Arizona Department of Water Quality (ADEQ) will continue to monitor water quality in the area. Watershed condition can be assessed using information from the monitoring schemes above. Monitoring of plant abundance, ground cover, species diversity and estimates of overall soil condition (using the methods described throughout this monitoring section) will indicate whether or not management practices are effectively meeting management goals. Trends toward improvements in species abundance and diversity should indicate that management practices are effectively improving soil condition and by inference, maintaining or improving downstream water quality and complying with water quality standards. Conversely, decreases in plant abundance and species diversity may indicate that management practices are not effective and need to be changed. Environmental factors, especially precipitation, will be considered when evaluating monitoring results.

Condition and trend monitoring was established at the following wetlands using photo point and plant inventories in the fall of 2003: Indian Lake, Long Lake, Al's Lake, Antelope Tank, Pickett Lake, Boot Lake, Ducknest Lake, Grass Lake, Indian Tank Lake, Long Lake, Perry Lake, Deep Lake, West Breezy Lake, and Breezy Lake. Additional monitoring of these plots may occur in the next 10 years if funding is available.

Canopy cover, frequency and composition plots were established at Perry Lake, Boot Lake, Ducknest Lake, Breezy Lake, West Breezy Lake, Indian Lake, Post Lake, Long Lake, and Deep Lake. Additional monitoring of these plots may occur in the next 10 years if funding is available. Residual cover monitoring will occur at Antelope Tank Lake, Pickett Lake, Indian Tank Lake, and Ducknest Lake to determine the height and density of wetland vegetation: (1) from cattle grazing after July 15; (2) within wetland exclosures; and (3) combination of cattle grazing after July 15 with yearlong rest. This monitoring would be established after the exclosures are built at Indian Tank and Ducknest Lakes. Monitoring would occur during the waterfowl nesting season as funding is available.

Wetland monitoring exclosures established in Boot, Breezy, Ducknest, Long, and Post Lakes

along with monitoring exclosures from adjacent allotments would provide detailed information on the effects grazing has on hydrophytic emergent vegetation. Monitoring has been completed annually since 2002 in these areas. Cattle management in these wetlands would be adjusted when condition and trend, frequency and canopy cover monitoring indicates vegetation is not positively responding. Any changes would most likely be made before the next grazing season.

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Adaptive Management Option for Fencing of Boot, Breezy, West Breezy and Indian Lakes: Added pressure may be put on Railroad and Ducknest pastures after Indian Tank, Ducknest, and Perry Lakes are fenced because no grazing would be allowed from June 1 through July 15 in seasonal or semipermanent wetlands. The Padre Canyon Allotment, Railroad, Ducknest, Morgan, and Woodland pastures would be monitored for condition and trend to determine if these pastures are being used too much at the same time of year, year after year. The clusters, canopy cover, frequency and ground cover plots in these pastures would help determine trends in these areas. These plots would be reread as necessary.

If monitoring indicates a downward trend in native plant community abundance and diversity in these pastures, or if the permittee requests increased flexibility in pasture rotations, the emergent vegetation and surrounding upland buffer would be fenced at Boot, Breezy, West Breezy and Indian Lakes. These additional wetland fences would allow Boot and Breezy pastures to be grazed from June 1 through July 15 with no disturbance to wetland nesting birds, except for lanes at Indian Tank and Boot Lakes.

Noxious Weeds: State-listed noxious weeds located in these allotments would be treated as necessary. The permittee and Forest Service would coordinate the weed inventory and treatment with responsibilities identified through the AOI. Noxious weed monitoring is carried out at the same time allotment inspections are conducted. As noxious weed populations are found they are mapped, monitored and in some areas, manually removed. Other treatment methods will follow guidelines established in the “Final Environmental Impact Statement for Integrated Treatment of Noxious or Invasive Weeds” (USDA 2005b).

Threatened and Endangered Species: Threatened and endangered species are monitored in compliance and consultation with the USFWS. Vegetation monitoring points (key areas) have been established on the allotment and are monitored according to consultation requirements. These key areas would normally be one-quarter to 1 mile from water, located on productive soils on level to intermediate slopes, and be readily accessible for grazing. Size of the key forage monitoring areas could be 20 to 500 acres. In some situations such as high mountain meadows with perennial streams, key areas may be closer than one-quarter mile from water and less than 20 acres. Within key forage monitoring areas, select appropriate key species to monitor average allowable use (USDA 1987a, p. 66-1).

One Mexican spotted owl (MSO) key area plot is already established on the Pickett Allotment and monitored annually:

- Management Area: Ponderosa pine/oak
- Pasture: Railroad
- Location: Southwest portion of this pasture
- Key Species: Squirreltail, June grass, Blue grass, Carex