United States Department of Agriculture | **Forest Service** | **Peaks Ranger District** | **5075 N. Highway 89 Flagstaff, AZ 86004-2852 Phone: (520) 526-0866 Fax: (520) 527-8288**

File Code: 2230

Date: April 27, 2005

Morrison Ranch
c/o Glen Morrison
P O Box 2347
Cottonwood, AZ 86326

Dear Glen:

This is your 2005 Summer Annual Operating Instructions (AOI) for the Windmill Allotment. 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 this allotment 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.

Allotment Area Description

The Windmill Allotment consists of 248,792 acres. These acres lie within three Ranger Districts of the Coconino National Forest and include some Arizona State Trust Lands. This Allotment has the following plant community types: ponderosa pine (103,256 acres), pinyon pine-juniper (27,941 acres), mountain meadows (3,745 acres), transitional type between ponderosa pine and pinyon-juniper (7,281 acres), chaparral (6,498 acres), desert grassland (87,526 acres), desert shrub (11,635 acres) and riparian (910 acres).

Mormon Lake Ranger District - Munds Pocket/Foxboro Division of the Summer Range

The Mormon Lake Ranger District portion of the Windmill Allotment consists of 52,302 acres. This area is called the Munds Pocket/Foxboro Division and is grazed in summer. The division extends north to south from James Canyon to the Coconino County line. The northern portion is referred to as Munds Pocket and the southern portion as Foxboro. The division extends east to west from the rim of Oak Creek Canyon to Fain Mountain, Casner Park and Pinewood and has two distinct cattle management areas. The Foxboro cattle herds consist of purebred Hereford cows, calves and bulls. The Munds Pocket cattle herd consists of replacement heifers and bulls.

Peaks Ranger District - Mill Park Division of the Summer Range

The Peaks Ranger District portion of the Windmill Allotment consists of 66,648 acres. This area is called the Mill Park Division and is also grazed in summer. The division extends north to south from the southern portions of Rogers Lake into the Sycamore Canyon and Red Rock-Secret Mountain Wilderness Areas. The western boundary is near Mooney Mountain and the

eastern boundary follows Highway 89 south to the rim of Oak Creek Canyon. The northern portions of this division contain 9,467 acres of Arizona State trust lands. These lands are interspersed with Coconino National Forest lands in a checkerboard configuration. The Mill Park cattle consist of crossbred cows, calves and bulls. This group of cattle is also known as the commercial herd.

Sedona Ranger District - Winter Division

The Sedona Ranger District portion of the Windmill Allotment consists of 129,842 acres. This area is called the Winter Division and is grazed during the winter season. The division extends north to south from the Peaks Ranger District boundary to the Beaver Creek Ranger District boundary. The area's eastern boundary meets Secret Mountain, Lost Mountain, Bear Mountain, the Boynton Canyon Range Allotment, the Sedona Range Allotment, the western portion of Munds Mountain, the western rim of Horse Mesa and Jacks Point. The western boundary meets Sycamore Canyon and the Verde River. The southwestern portions of the Winter Division contain 8,023 acres of Arizona state trust lands. These lands lie approximately four miles northeast of Cottonwood, Arizona and are bisected by Highway 89A. The Foxboro herds graze the southern portion of this division from Jacks Canyon to House Mountain. The Munds Pocket herd grazes the central portion of this division in the D.K-Malapais-Strip pasture area. The Mill Park herd grazes the southwestern portion of this division in Cornville-Sheepshead pasture area.

The allotment contains the following Land Management Plan Management Areas:

MA 1-Wilderness
MA 2-Verde Wild and Scenic River
MA 3-Ponderosa Pine and Mixed Conifer
MA 4-Ponderosa Pine on greater than 40%
MA 5-Aspen
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 11-Verde Valley
MA 12-Riparian
MA 14-Oak Creek Canyon

The Windmill Allotment occurs in four 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.

5th Code Watershed (Acres)	Allotment (Acres)	% Of Allotment Within Watershed
Sycamore Canyon (103,894)	27,948	26
Oak Creek Canyon (298,114)	158,360	53
Dry Beaver Creek (127,043)	34,606	27

Camp Verde (42,105)	27,935	51

The following is a list of Best Management Practices (BMP's) developed for the 1998 Environmental Impact Statement.

PLANNED GRAZING SYSTEMS - Grazing systems are alternately rested and grazed in a planned sequence. See each alternative for specifics on how this practice is adopted.

PROPER GRAZING USE - Grazing at an intensity that will maintain enough cover to protect the soils and maintain or improve the quantity and quality of desired vegetation. See each alternative for specifics on how this practice is adopted.

STREAM BANK PROTECTION - Stabilizing and protecting stream banks against scour and erosion through vegetative and structural rehabilitation means. Livestock grazing will not be allowed in Oak Creek, Sycamore Creek, Verde River, Spring Creek, and Sheepshead Spring. Above the rim, ungulate grazing will be restricted or eliminated at T-six spring, Fain Spring, and Willard Spring.

TROUGH OR TANK - To provide watering facilities for animals at selected locations. See Table 1 for new tank construction, pipeline construction, and water lot development. These improvements are intended to increase distribution of livestock and wildlife.

FENCING - Fencing is intended to improve livestock and wildlife management, control access, to prevent soil loss, and to improve water quality. See table 1 for a list of fencing improvements.

Site-specific practices for the Windmill Allotment include the following:

In all the dry meadows, progress towards improved soil conditions by one of more of the following: reducing graze periods, relocating or removing stock tanks, building waterlot fences around tanks, splitting pastures and obliterating or re-routing roads in meadows.

Reduce graze periods to less than or equal to 20 days during fast plant growth as much as possible. Fast forage growth is usually mid-July thru August and mid-March to mid-May with flexibility for when rains arrive. This will reduce regrazing of forage regrowth, which is better for plant health and vigor.

Incorporate yearlong rest from cattle into every pasture wherever possible in the summer range rotations. This yearlong rest from cattle improves overall forage health by allowing more plants to reach maturity and reproduce.

Increase variability of pasture deferment, i.e. different season of use each year of the rotation.

The summer cattle range is not used before the cool season species have finished their fast forage growth (June 1st or later) to allow these plants to reach maturity.

In riparian areas below the Mogollon Rim reduce time of cattle grazing or exclude from cattle grazing. Riparian areas identified are, portion of Oak Creek, Dry Creek, Sheepshead Creek and Jacks Canyon.

Riparian grazed by cattle above the Rim will receive reduced graze periods by cattle and varied season of use. Several of these areas will be fenced and excluded from cattle grazing. Riparian areas identified are: T-6 Spring, Willard Spring, Fain Spring and a portion of Rogers Lake.

Sweep cattle out of riparian areas above and below the Mooney Trail after moving them along the trail between summer and winter ranges.

Move cattle between pastures and summer and winter ranges according to each area's readiness for grazing.

Ensure that the permittee complies with the terms and conditions of the allotment permit.

Your term grazing permit information along with your 2005 summer grazing schedule is listed below:

Mill Park Herd

Permittee Name	**Permit Type**	**Season**	**Permitted No.**
Morrison Ranch	Term	Yearlong	515 cows/calves & bulls
	State Land	Yearlong	160 cows/calves & bulls
			Total 675

Pasture Name	**Use Dates**	**Total Number**
Buck/Winter Hold.	6/5-6/14	480 cows/calves & bulls
W. Barney	6/15-7/5	480
E. Barney	7/6-7/20	480
Lockwood	7/21-8/4	480
Fry Park South	8/5-8/12	480
Fry Park	8/13-9/7	480
Mill Park	9/8-10/3	480
Metz Holding	10/4-10/9	480
Rodgers Lake	yearlong rest	
Harding/Mex.Poc.	yearlong rest	

Foxboro Herd

Permittee Name	**Permit Type**	**Season**	**Permitted No.**
Morrison Ranch	Term	Yearlong	250 cows/calves

Pasture Name	**Use Dates**	**Total Number**
Jacks Point	Yearlong Rest	
Rocky Park Holding	Yearlong Rest	

Luke Mountain	Yearlong Rest
T-6/Little T-6	Yearlong Rest
Skeleton Holding	Yearlong Rest
Arts Tank	Yearlong Rest
Highway Camp	Yearlong Rest

Munds-Pocket Herd

Permittee Name	**Permit Type**	**Season**	**Permitted No.**
Morrison Ranch	Term	Yearlong	250 cows/calves & bulls

Pasture Name	**Use Dates**	**Total Number**
Ritter	6/1-7/1	178 yearlings
Crazy Park	7/2-8/12	178
Blowout	8/13-8/27	178
Mud Lake	8/28-10/1	178
Holding	10/2-10/5	178
N. Geronimo	yearlong rest	

The pasture move dates shown above are an estimate, and may need to be changed on the basis of actual range conditions. Please 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 years Annual Operating Instructions that states 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.

Seasonal utilization monitoring will be conducted throughout the year in every livestock grazed pasture following the protocol set up in the attached worksheet. In addition, key site and key species monitoring, to further conform to the Coconino Forest Plan, will be conducted at the following sites on the allotment:

Mill Park Herd

Management Area	Pasture	Location	Key Species
ponderosa pine/oak	East Barney	Buckhead Point	squirreltail, fescue
ponderosa pine/oak	West Barney	539 Road	squirreltail, fescue

Munds-Pocket Herd

Management Area	Pasture	Location	Key Species
ponderosa pine/oak	Ritter	Ritter Butte	squirreltail, fescue

Foxboro Herd

Management Area	Pasture	Location	Key Species
ponderosa pine/oak	Luke Mtn.	239 Road	squirreltail, fescue

The allowable level of utilization on herbaceous and woody vegetation is 50% on this allotment because of the intensive grazing management system in place. Livestock utilization of woody vegetation in riparian areas may not exceed 20%. This will ensure proper protection and management of resources on this allotment.

Adjustments in numbers, rotation schedule or season of use will be made if allowable use standards 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.

Range improvements scheduled for this year will be reconstructing part of the eastern allotment boundary fence including a cattle guard.

Before any of these improvements can be put in place, archeological and biological clearances will be completed.

Refer to the attached map for the areas that are excluded from cattle grazing during this 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 Katherine Sánchez Meador or Mike Hannemann, at 526-0866 at the Peaks District Office.

Sincerely,

/s/ Gene Waldrip April 28, 2005
Gene Waldrip Date
District Ranger

I have read and agree to these operating instructions.

/s/ Mike Hughs
Mike Hughs for Glen Morrison

Planned Monitoring

Monitoring on this allotment over this year and up to the next 10 years will include: compliance, allotment inspections, range readiness, forage production, rangeland utilization, condition and trend, soil and riparian condition, and threatened and endangered species habitat.

Compliance: Throughout each grazing season, compliance monitoring will be done by Forest Service personnel to determine accomplishment of the terms and conditions of this permit, Allotment Management Plan, and Annual Operating Instructions.

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 monitoring summary.

Range Readiness: Each spring, Forest Service personnel will assess range readiness prior livestock coming on the allotment to determine if vegetative conditions are ready for livestock 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 so grazing will not seriously impact these forage plants.

Forage Production: Forage production surveys for the allotment will be done every nine to 13 years. Methods used for these surveys will be done by the best available methods at that time. These values will be used as tools to manage this allotment, but will not be the sole measure to set carrying capacity.

Rangeland Utilization: Utilization monitoring is an estimate of the available forage by weight consumed or trampled through grazing and is expressed as a percent of the current year’s biomass removed. Utilization monitoring is designed to assess key forage utilization levels by livestock and elk during the year and from year to year.

Key forage species for this allotment include western wheatgrass, blue grama, squirreltail, Mountain muhly, and Arizona fescue. Utilization and seasonal utilization monitoring will be conducted by the permittee and spot checked by Forest Service personnel throughout the year in every grazed pasture. This monitoring will calculate an overall utilization value for a pasture 1) before livestock go into a pasture, 2) within five days after livestock leave a pasture, and 3) at the end of the growing season in the fall. The goal for utilization will be 35% or less by livestock throughout the year with this livestock grazing system.

In addition, key site and key species monitoring will be conducted in each of following habitat types: pine (oak), riparian, mountain meadow, and aspen, if these habitat types are present on the allotment and are grazed by livestock. Utilization monitoring will also occur in selected pastures rested from livestock grazing by Forest Service personnel.

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 trend. In the past we have used Parker 3-step and paced transects to determine condition and trend. We now have better monitoring techniques such as canopy cover and frequency ground cover plots.

Parker 3-step and paced transect monitoring points were established throughout this allotment in the 1950-60's. 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. The new plots will be placed with the Parker 3-step transects in most locations to add to this historic data. The original photo points will be retaken.

Ocular plant canopy cover 0.10 acre plots will be 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 that can be a relative gauge of vigor.

Frequency and ground cover data will be 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. All this information will be statistically valid. 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 be used to help determine the effectiveness of the current management.

Precipitation: Precipitation is currently recorded within or near this allotment at Flagstaff National Weather Service Office at Bellemont, Flagstaff Airport, Sedona Airport and all the active fire lookout towers on the Forest. We suggest that additional rain gauges be established at your headquarters or other convenient location for a more accurate record of your local precipitation. This data could be recorded throughout the year and summarized in the annual inspection.

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 assist line officers and resource managers in evaluating effects of management activities on soil and water resources; 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. Arizona Department of Water Quality (ADEQ) will continue to monitor water quality in the area.

Evaluating 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 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.

Improving trends for riparian vegetation and stream channel conditions (if applicable on this allotment) should indicate that management practices are effectively benefiting water quality. Conversely, decreases in riparian vegetation or channel condition indicate that management practices are not effective and need to be changed. Environmental factors, especially flooding, will be considered when interpreting monitoring results.

Rationale: This monitoring program gives this alternative the best data possible to monitor the effectiveness of your Allotment Management Plan while staying within the projected