United States Department of Agriculture **Forest Service** **Peaks Ranger District**
5075 N. Highway 89
Flagstaff, AZ 86004-2852
Phone: (928) 526-0866
Fax: (928) 527-8288

File Code: 2230

Date: May 12, 2006

Marilyn Michelbach Coy
10049 N. 40th St.
Phoenix, AZ 86028

Dear Marilyn:

These are your 2006 Annual Operating Instructions (AOI) for the Crater Lake 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.

Crater Lake Allotment Area Description

The Crater Lake Allotment consists of 1,877 acres northwest of Flagstaff, Arizona and east of the Coconino/Kaibab National Forest boundary. These acres lie within Peaks Ranger District of the Coconino National Forest. The allotment lies west of State Highway 180, and north of the Forest Service Fort Valley Experimental Forest. The Crater Range Allotment is located within all or portions of T21N, R5E, Sections 1 and 12 and T21N, R6E, Sections 5-9 and 18. The grazing system is a four pasture deferred rest rotation system.

Topography of the allotment is flat to rolling, at an elevation of approximately 7500'. Vegetation is primarily ponderosa pine/bunchgrass with open areas created by the White Horse burn in 1967 and the Trick burn in 1993.

The allotments contain the following Land Management Plan Management Area:
- MA 3-Ponderosa Pine and Mixed Conifer

The Crater Lake Allotment occurs in one 5th code watershed. The following table is a summary of number of total acres within the 5th code watershed and acres of the allotment that occur within each watershed.

5th Code Watershed (Acres)	Allotment (Acres)	% of Allotment Within Watershed
Sycamore Canyon (103,894)	1,891	1

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

- Monitor and enforce permittee compliance with terms and conditions of the grazing permit.

- Manage livestock grazing within (TES unit 55) meadows at an intensity that will improve vegetation ground cover (primarily the litter component) and improve species diversity of perennial grasses.

- Rotate livestock in a planned grazing system that alternates rest and graze period throughout a given year and from year to year.

- Grazing at an intensity that will maintain enough cover to protect the soils and maintain or improve the quantity and quality of desired vegetation.

Your term grazing permit information along with your 2005 grazing schedule is listed below for this allotment:

Crater Lake

Permittee Name	**Permit Type**	**Season**	**Permitted No.**
Michelbach Ranch	Term	6/1-10/31	61 cows/calves & bulls

Pasture Name	**Use Dates**	**Total Number**
White Horse	6/1-7/15	40
Little Horse	7/16-8/31	40
Antelope	9/1-10/31	40

The pasture move dates shown above are an estimate, and may need to be changed on the basis of actual range conditions. Due to the current drought 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.

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. Salting occurs throughout the allotment, but is not used in northern goshawk post-fledgling areas, meadows, burn areas. This would exclude the northern half of Little Horse Pasture, and the northeast portion of the Antelope Pasture.

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 AOI's, livestock utilization and overall range condition and trends.

The allowable level of utilization on herbaceous and woody vegetation is 35% on this allotment. 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. To achieve the desired allowable use, it is important to have proper livestock distribution.

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

If you have any questions please call Katherine Sanchez Meador or Mike Hannemann at 526-0866.

Sincerely,

/s/ Gene Waldrip

_____

Gene Waldrip
District Ranger

I have reviewed and agree with these Annual Operating Instructions

/s/ Marilyn Michelbach Coy

_____

Marilyn Michelbach Coy

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. 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 completed 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 this allotment 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.

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 in the 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 when seasonal utilization in a pasture approaches a “moderate” level. Moderate seasonal utilization would be approximately 21-50 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 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 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, and 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 (BMP) and grazing practices (GP) 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.

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".

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 will be monitored according to consultation requirements.

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. Within key forage monitoring areas, select appropriate key species to monitor average allowable use (USDA 1987a, p. 66-1).

A new key monitoring site will be established within the next two years, and will represent the allotment with annual monitoring data. The following information will be collected at this new location; utilization, canopy cover, frequency, ground cover, and production, along with photos. This annual data will give us site specific information for long term condition and trend. The

Forest Service would like the permittee to be involved in selecting the site and collecting the data.