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: 5/9/03

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

Dear Marilyn and Voy

These are your 2003 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 1,483 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, Section 1,12 and T21N, R6E, Sections 5-9 and 18. The grazing system is a 4 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 2003 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**
Antelope		
Little Horse		
White Horse W.		
White Horse E.		

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. Livestock will be excluded from the wildlife drinker, which is supplied by Orchard Trick Tank. 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.

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.

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:

Management Area	**Pasture**	**Location**	**Key Species**
ponderosa pine	Antelope	off FS road 247	squirreltail, Mtn. muhly Arizona fescue

The allowable level of utilization on herbaceous and woody vegetation is 35% on this allotment. 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. 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.

Two cattleguards and the ½ mile barbed wire fence splitting White Horse Pasture into two pastures is planned for the 2003 season. Additional cattleguards maybe put in, as time allows.

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

Sincerely,

_____

Gene Waldrip
District Ranger

I have reviewed and agree with these Annual Operating Instructions

Agreed to by:_____
Marilyn Coy

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 a 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 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. Utilization will be averaged into the following five categories: no-use (0-10%), light (11-20%), moderate (21-50%), high (51-70%) and extreme (71%+). The goal for utilization will be 35% or less by livestock throughout the year with this intensive 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. Several Fixed Station, Biocriteria Program, and other water quality monitoring sites maybe located within or near the allotment. These sites have and are being used to track long-term conditions and trends at critical points in a watershed and to develop biological criteria for stream segments. Information from these sites will be considered in evaluating the effectiveness of management practices, but may be of limited value considering the multitude of influences affecting each monitoring site.

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 Forest Service budget.