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File Code: 2230

Date: April 23, 2007

W.J. and Betty Lo Wells
P O Box 515
Chino Valley, AZ 86323

Dear Bill:

These are your updated 2007 Annual Operating Instructions (AOI) for the Cosnino and Maxwell Springs 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.

Cosnino Allotment

The Cosnino Allotment consists of 10,871 acres east of Flagstaff, Arizona. These acres lie within the Peaks Ranger District of the Coconino National Forest. The allotment is bisected by Interstate Highway 40 and lies north of Walnut National Monument and borders the east side of the City of Flagstaff. The grazing system is a six pasture deferred rest rotation system.

The western portion of the allotment is a ponderosa pine community at an elevation of approximately 7000'. The eastern portion is a pinyon-juniper community. The northern side is dominated by Turkey Hills, which is a cinder hill.

The allotment contains the following Land Management Plan Management Areas:

MA 3-Ponderosa Pine and Mixed Conifer
MA 6-Unsuitable Timber Land
MA 7-Pinyon-Juniper, Less Than 40% Slope
MA 10-Transition Grassland
MA 13-Cinder Hills

The Cosnino Allotment occurs in two 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.

5th Code Watershed (Acres)	Allotment (Acres)	% of Allotment Within Watershed
Lake Mary (97,203)	3,800	4
Flagstaff (145,396)	7,000	5

The following is a list of Best Management Practices (BMP's) developed in the 1995 Cosnino Allotment Environmental Assessment.

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

- 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.

Permitted Grazing Information 2007

Your term grazing permit information along with your 2007 grazing schedule for the Cosnino Allotment is listed below for this allotment:

Permittee Name	**Permit Type**	**Season**	**Permitted No.**
W.J. & Betty Lo Wells	Term	6/1-10/31	160 cows/calves & bulls

Pasture Name	**Use Dates**	**Total Number**
Upper Burn	6/1-6/25	160
Pinyon	6/26-7/17	160
Lower Burn	7/18-8/23	160
Wildcat	8/24-9/28	160
Home	9/29-10/31	160
Monument	yearlong rest	

Maxwell Springs Allotment

The Maxwell Springs Allotment consists of 21,410 acres northwest of Flagstaff, Arizona. These acres lie within the Peaks Ranger District of the Coconino National Forest. The allotment runs north of Bellemont, west of Badderville and north to Hart Prairie. The grazing system is a seven pasture deferred rest rotation system.

The majority of the allotment is a ponderosa pine community at an elevation of approximately 7000'. Within the ponderosa pine community lays scattered pockets of mountain meadows, aspen, and riparian community types. No riparian areas within the allotment are accessible to cattle.

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 5-Aspen
MA 9-Mountain Grassland
MA 10-Transition Grassland
MA 12-Riparian

The Maxwell Springs Allotment occurs in two 5th code watersheds. The following table is a summary of number of total acres within each 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)	12,800	12
Flagstaff (145,396)	8,500	6

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

- One of the main goals for livestock grazing practices on this allotment is to maintain or improve the quality of water.

- 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.

- 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.

- Land treatments to manage vegetation or practices to reduce erosion should be planned, implemented and maintained to minimize adverse impacts on water quality.

- Livestock management activities, such as parasite control, feeding and salting, should be done in a manner to protect water quality.

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

Permitted Grazing Information 2007

Your term grazing permit information along with your 2007 grazing schedule for the Maxwell Springs Allotment is listed below for this allotment:

Permittee Name	**Permit Type**	**Season**	**Permitted No.**
W.J. & Betty Lo Wells	Term	6/1-10/31	285 cows/calves & bulls

Pasture Name	**Use Dates**	**Total Number**
Camp Two	6/10-7/21	285
Maxwell	7/22-7/31	285

Hart Prairie	8/1-9/12	285
Wing	9/13-10/2	285
Telephone	10/3-11/3	285
Holding	11/4-11/9	285

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 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 maps show the general location of these areas that are not obvious on the ground. These maps do 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 AOI’s, livestock utilization and overall range condition and trends.

Refer to the attached map for the areas that are excluded from cattle grazing during this grazing season (Marvin Spring, Maxwell Spring, Lower Twin Tank, Fort Valley and Walnut Canyon National Monument). All fences must to 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.

The utilization guideline on herbaceous and woody vegetation is 35% on these allotments.

Adjustments in numbers, rotation schedule or season of use will be made if allowable utilization guidelines are exceeded. To achieve the desired utilization, 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 Mike Hannemann at 526-0866.

Sincerely,

/s/ Gene Waldrip
Gene Waldrip
District Ranger

I have reviewed and agree with these Annual Operating Instructions.

/s/ Bill Wells
Bill Wells

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.