

# **MONITORING ACTION PLAN**

## **APACHE-SITGREAVES NATIONAL FORESTS**

(synopsis)

### **INTRODUCTION**

Monitoring is defined as "the collection of information to determine effects of resource management and to identify changing resource condition or needs" (6/92 Draft proposed NFMA Regulations). The Regional Forester has further asked that monitoring activities in Region Three provide for deliberate, visible, understandable, and consistent monitoring.

This action plan is an extension of Chapter Five (The Monitoring Plan) of the Apache-Sitgreaves Land and Resource Management Plan (LRMP). It describes the manner in which individual monitoring items will be conducted so that the Forest will meet the definition of "Monitoring" and the characteristics the Regional Forester has requested.

The annual results of the Forests monitoring efforts will be aggregated from the Districts and S.O. Resource Staff units into an annual Monitoring Report. The Forest Planning Staff is responsible for assembling this report.

It is intended that our monitoring efforts on the Forests should be kept simple. If it becomes complicated and expensive, it is likely it won't be accomplished.

### **FORMAT OF MONITORING ITEMS**

#### **Priority**

Each monitoring item has been assigned a priority of one, two or three. The A-S will monitor all priority one activities. Line Officers and Forest Staff Officers will use discretion as to which priority two and three items are monitored, but it is anticipated that at a minimum several priority two items will require monitoring activity. Priority descriptions are as follows:

**Priority One** - Items assigned a priority of one will satisfy the following needs. Monitoring that is necessary to meet law or regulation; key Forest commitments; or where the monitoring effort would determine excellent and key resource condition status. Since these are critical monitoring needs, there will probably be little Ranger/Forest Staff discretion as to whether these items are/or are not included in the annual monitoring effort.

**Priority Two** - Items, assigned a priority two, will be monitoring that is of a high public interest or the monitoring would provide a good determination of important resource status. Rangers/Forest Staff will have a good deal of discretion as to whether these monitoring actions are included in the annual monitoring effort.

**Priority Three** - Priority three items are routine measures of programs and / or are not of a critical nature. Some of these items may be included in our annual monitoring effort but Rangers/Forest Staff will have full discretion on their incorporation.

## **Desired Condition Statement**

This a brief statement derived from the Forest Plan. It is intended to provide a snapshot of the desired resource condition. The monitoring actions will be measuring the progress towards or away from this condition.

## **Management Areas Affected**

Monitoring described in each monitoring item will generally be occurring only with activities in these areas.

## **Monitoring Questions and Types of Monitoring**

The execution of this monitoring action plan should result in data for three levels of monitoring. The three levels are: Implementation Monitoring - this type of monitoring would indicate whether our management activities are in line with the Forest Plan objectives, standards and guidelines; Effectiveness Monitoring - this monitoring would help us determine if our properly executed standards and guidelines are achieving the management direction or desired future conditions as set forth in the Forest Plan; Validation Monitoring - data from this monitoring indicates if our Forest Plan is effectively addressing original issues, concerns or opportunities upon which the Plan was founded.

There are monitoring questions asked in each monitoring item. These questions when answered will provide data for the three levels of monitoring. Not all monitoring items have questions for all three levels of monitoring.

## **Sampling Methods**

Each monitoring item describes sampling methods that are numbered and that correspond to the numbered monitoring questions. These should be reasonable methods of acquiring, or sources of, information to address the respective monitoring questions.

## **When To Take Action**

This section relates what is in the LRMP Chapter five under "variability that would initiate re-evaluation". There may be other valid measures of change upon which we could base LRMP amendment or revision but the ones listed here are the ones the Plan obligates us to consider.

## **Responsible Official**

This section gives the individual directly responsible for initiating monitoring efforts. This responsibility may vary by the sampling method used or type of data gathered. Many other Forest specialists will be assigned the responsibility of conducting the actual monitoring actions.

## **DATA LOCATION**

This is where data regarding a specific monitoring item should be stored. Specifying the location will standardize where managers will retrieve data for the annual monitoring report and for analysis of monitoring findings.

## **RELATIONSHIP OF FOREST MONITORING TO PROJECT MONITORING (IRM Phase 13)**

There is to be a very strong tie between our Forest monitoring efforts and individual project monitoring. It is expected that all environmental assessments for future and currently active projects will have a monitoring section which will specify what monitoring will be conducted during and/or following project implementation. When decision documents are signed the line officer approving the project is committed, within reason, to completing the monitoring activities specified in that assessments monitoring section. Funds and personnel will be programmed to accomplish the monitoring. Annually the results of individual project monitoring and Forest level monitoring will be aggregated into the Forest's Monitoring Report.

## **ANNUAL MONITORING REPORT**

The monitoring outline following this section is to be used to document monitoring activities. Adherence to this outline will enable the Forest to consistently aggregate and report annually the results of the Forest's monitoring.

# MONITORING FORM

(Use this outline in reporting monitoring activities)

DISTRICT / STAFF AREA:

PROJECT NAME AND / OR SITE / ACTIVITY MONITORED:

MONITORING TYPE:

MONITORING OBJECTIVE (MONITORING QUESTIONS FOR WHICH THIS  
MONITORING WILL PROVIDE DATA)

PRIORITY:

METHODOLOGY:

CONSTRAINTS TO MONITORING (IF ANY):

FREQUENCY / DURATION:

DATA STORAGE:

RESULTS:

COSTS (DOLLARS AND TIME):

RESPONSIBLE OFFICIAL:

REPORTED BY:

NEEDED CHANGES IN MONITORING REPORTING:

DATE:

# **DESCRIPTION OF INDIVIDUAL MONITORING ITEMS:**

## **MONITORING ITEM #01: DEVELOPED RECREATION SITE USE**

PRIORITY - 3

DESIRED CONDITION: Developed recreation sites are safely managed with an intent to provide the capacity and facilities responsive to customer's expectations.

MANAGEMENT AREAS AFFECTED: All developed recreation sites.

## **MONITORING ITEM #02: ORV COMPLIANCE AND DAMAGE**

PRIORITY - 3

DESIRED CONDITION: Manage ORV use to provide for recreation opportunities in a manner consistent with the protection and management of other Forest resources and meeting provisions of site specific dispersed area plans that relate to ORV use.

MANAGEMENT AREAS AFFECTED: All

## **MONITORING ITEM #03: DISPERSED AREA USE AND EXPERIENCE LEVELS**

PRIORITY - 3

DESIRED CONDITION: Provide undeveloped recreation sites with minimum facilities as specified in dispersed area plan and responsive to customer expectations and desires without causing unacceptable resource damage.

MANAGEMENT AREAS AFFECTED: All

## **MONITORING ITEM #04: CULTURAL RESOURCE COMPLIANCE**

PRIORITY - 1

DESIRED CONDITION: All potential ground disturbing project sites are properly surveyed to identify cultural resources.

MANAGEMENT AREAS AFFECTED: ALL

## **MONITORING ITEM #05: CULTURAL RESOURCE PROPERTY PROTECTION**

PRIORITY - 2

DESIRED CONDITION: Management of cultural resources meets Federal regulations and Forest policies. National Register properties are protected adequately and needed maintenance is done in a timely manner.

MANAGEMENT AREAS AFFECTED: All

## **MONITORING ITEM #06: TRAIL CONDITION**

PRIORITY - 3

DESIRED CONDITION: Provide and manage system trails and related facilities needed to accomplish land and resource management and protection objectives on the Forest. Trails provide safe public travel and do not cause unacceptable resource damage.

MANAGEMENT AREAS AFFECTED: All system trails

## **MONITORING ITEM #07: VISUAL QUALITY**

PRIORITY - 3

DESIRED CONDITION: Management of the visual resource is in accordance with the visual quality objectives in the Forest Plan.

MANAGEMENT AREAS AFFECTED: All

## **MONITORING ITEM #08: WILDERNESS**

PRIORITY - 3

DESIRED CONDITION: Management of the Wilderness and Primitive Areas is in accordance with the values specified in the Wilderness Act and levels of use do not exceed approved levels. Resource damage is minimized and changes in WOS classifications, particularly the semi-primitive class, is minimal.

MANAGEMENT AREAS AFFECTED: All wilderness areas and primitive areas.

## **MONITORING ITEM #09: MOUNT BALDY WILDERNESS CONDITION**

PRIORITY - 3

DESIRED CONDITION: Not developed at this time. Limits of acceptable change and operating plan to be completed in FY '93.

MANAGEMENT AREAS AFFECTED: 07

### **MONITORING ITEM #10: THREATENED, ENDANGERED AND SENSITIVE SPECIES**

Priority - 1

DESIRED CONDITION: Maintain or enhance suitable habitat capability for T,E&S species and meet recovery objectives.

MANAGEMENT AREAS AFFECTED: All management areas with known or capable habitat in which projects may affect habitat required by specific listed or sensitive species.

### **MONITORING ITEM #11: WILDLIFE ECOSYSTEM DIVERSITY**

Priority - 2: All proposed projects will be modeled as a minimum.

DESIRED CONDITION: To be described by silvicultural prescription for a full rotation by stand.

MANAGEMENT AREAS AFFECTED: 10K blocks in Ponderosa pine and mixed conifer and allotment pastures in Pinon / Juniper.

### **MONITORING ITEM #12: AQUATIC MACROINVERTEBRATES**

PRIORITY - 1

DESIRED CONDITION: Water quality in perennial Forest streams is adequate to insure long term reproduction and survival of all life stages of fish species. Water quality in any perennial stream does not contribute to degradation of water quality of streams into which it flows. The diversity and biomass of clean water macro invertebrates are adequate to provide a stable food source for all fish species that depend on them. The Biotic Condition Index (BCI), a numerical indicator of water quality as it affects invertebrates and fish species, should not fall below 80. State water quality standards, which pertain to stream fisheries, are met.

MANAGEMENT AREAS AFFECTED: All

### **MONITORING ITEM #13: STREAM HABITAT SURVEY**

PRIORITY - 1

DESIRED CONDITION: Forest perennial streams provide satisfactory habitat for fish and aquatic species that are biologically suited to each stream. Streams can support self sustaining populations of desired fish species. FS LMP standards and guidelines for streams are being met,

and riparian areas that directly affect streams are in satisfactory condition. State water quality standards for designated stream use are being met.

MANAGEMENT AREAS AFFECTED: All

### **MONITORING ITEM #14: RANGE - GRAZING**

PRIORITY - 2

DESIRED CONDITION: Permitted livestock use is consistent with and is in compliance with the Term Grazing Permit and allotment management plan. Actual use by permitted livestock numbers and wildlife populations are allowed to fluctuate with on-the-ground conditions, reflecting various conditions that may exist, such as drought, allowing actual use to fluctuate and still allow ecosystems to advance towards their desired future conditions as described in specific allotment management plans. Grazing allotments are stocked with the proper number and class of permitted domestic livestock and wildlife populations without unacceptable degradation to other resources and uses.

MANAGEMENT AREAS AFFECTED: All

### **MONITORING ITEM #15: ECOSYSTEM CONDITION AND TREND**

PRIORITY - 2

DESIRED CONDITION: All ecosystems, with added emphasis in the riparian and wetlands ecosystems, are advancing towards healthy conditions described in site specific allotment management plans consistent with current social values and people's desires.

MANAGEMENT AREAS AFFECTED: All

### **MONITORING ITEM #16: ALLOTMENT MANAGEMENT PLAN STATUS**

PRIORITY - 1

DESIRED CONDITION: Allotment management plans are consistent with the Forest Plan and allow ecosystems to reach their desired future conditions described in site specific allotment management plans consistent with current social values and people's desires.

MANAGEMENT AREAS AFFECTED: All

### **MONITORING ITEM #17: RANGE IMPROVEMENTS**

PRIORITY - 3

DESIRED CONDITION: The condition of structural range improvements are satisfactory to allow desirable range management practices. Unsatisfactory improvements are replaced in a

timely manner so proper range management practices can be continued. Unnecessary improvements are removed. The condition of range nonstructural improvements are satisfactory to meet forage production objectives consistent with soil, watershed, wildlife, ecosystem, and livestock needs. Ecosystems being re-invaded with undesirable vegetation species are evaluated and treated in a timely manner consistent with Forest Plan and allotment management plan goals and objectives. Treatment of the pinyon-juniper ecosystems are within Forest Plan objectives.

MANAGEMENT AREAS AFFECTED: All

## **MONITORING ITEM #18: TIMBER REFORESTATION**

PRIORITY - 1

DESIRED CONDITION: Re generation is obtained within 5 years after final harvest cut and in other areas where scheduled planting is accomplished.

MANAGEMENT AREAS AFFECTED: All timber harvested areas and other regeneration areas.

## **MONITORING ITEM #19: TIMBER STAND IMPROVEMENT**

PRIORITY - 3

DESIRED CONDITION: Timber Stand Improvement projects are accomplished in accordance with the projections and guidelines in the Forest Plan.

MANAGEMENT AREAS AFFECTED: All areas where scheduled or non-scheduled timber harvest can occur.

## **MONITORING ITEM #20: SILVICULTURAL PRACTICES**

PRIORITY - 2

DESIRED CONDITION: Silvicultural prescriptions precede vegetative treatments, follow management area standards, and are practical and achieve desired results.

MANAGEMENT AREAS AFFECTED: All areas where scheduled or non-scheduled timber harvest may occur.

## **MONITORING ITEM #21: VOLUME / PRODUCTIVITY CLASS**

PRIORITY - 3

DESIRED CONDITION: Board foot/ cubic foot ratios and volume/acre yields are being achieved as projected in the Forest Plan.

MANAGEMENT AREAS AFFECTED: Management areas 1,9.

## **MONITORING ITEM #22: SIZE OF OPENINGS**

PRIORITY - 2

DESIRED CONDITION: Achieve desired unit sizes and dispersal of units across the forest, as stated in the Forest Plan.

MANAGEMENT AREAS AFFECTED: All areas where scheduled or non-scheduled timber harvest may occur.

## **MONITORING ITEM #23: TIMBER OFFERED**

PRIORITY - 3

DESIRED CONDITION: Timber offered does not exceed allowable sale quantity for 10-year period.

MANAGEMENT AREAS AFFECTED: All areas where scheduled or non-scheduled timber harvest may occur.

## **MONITORING ITEM #24: CORDS OF FIREWOOD OFFERED**

PRIORITY - 3

DESIRED CONDITION: Potential firewood from timber sales and road building is made available to the general public before slash disposal. In addition, green firewood is made available to meet resource objectives.

MANAGEMENT AREAS AFFECTED: All areas where scheduled or non-scheduled timber harvest may occur.

## **MONITORING ITEM #25: REGENERATED YIELD PROJECTIONS**

PRIORITY - 3

DESIRED CONDITION: Tree growth is occurring at the rate projected in forest plan yield tables.

MANAGEMENT AREAS AFFECTED: All areas where scheduled or non-scheduled timber harvest may occur.

## **MONITORING ITEM #26: TIMBER SUITABILITY**

PRIORITY - 2

DESIRED CONDITION: Timber suitability is accurately classified on the A/SNF. The entire forest is examined for land classification in the first decade ( 1/10 of the Forest annually)

MANAGEMENT AREAS AFFECTED: All areas where scheduled or non-scheduled timber harvest may occur.

### **MONITORING ITEM #27: WATERSHED**

PRIORITY - 1

DESIRED CONDITION: Treatable Forest watersheds are in a satisfactory condition to insure soil productivity is maintained for future generations. State water quality standards are met or exceeded. All beneficial uses of a watershed, including TES fish, are not impaired from management activities. Projects are monitored to insure compliance with and adequacy of project related recommendations and to insure water and soil quality standards are being met through application of Best Management Practices.

MANAGEMENT AREAS AFFECTED: All

### **MONITORING ITEM #28: RIPARIAN ECOLOGICAL STATUS**

PRIORITY - 2

DESIRED CONDITION: Riparian areas and wetlands are in satisfactory ecological condition or are moving towards that direction in a timely manner. Riparian projects are monitored to insure improvement is occurring in ground cover, plant species composition, bank stability, adequacy of and compliance with project related recommendations.

MANAGEMENT AREAS AFFECTED: All

### **MONITORING ITEM #29: ROAD OBLITERATION AND CLOSURE**

PRIORITY - 2

DESIRED CONDITION: Road densities on the Forest meet or are less than that prescribed in the Forest Plan. Only those roads necessary to accomplish public/administrative access or resource activities are constructed and maintained. Roads will be planned, designed and constructed to the minimum level necessary to meet the needs of all resources. All other roads have been obliterated.

MANAGEMENT AREAS AFFECTED: All

### **MONITORING ITEM #30: COMPLIANCE WITH TERMS OF MINERALS OPERATING PLANS**

PRIORITY - 3

DESIRED CONDITION: Review and administer Operating Plans to ensure that;

1) the proposed operations are reasonable methods of operation; 2) reclamation needs are properly addressed; 3) where appropriate, a bond to insure reclamation is secured; 4) operations receive monitoring during operations.

MANAGEMENT AREAS AFFECTED: All

### **MONITORING ITEM #31: SPECIAL USE PERMITS**

PRIORITY - 3

DESIRED CONDITION: Respond to special use applicants within 15 to 30 working days informing applicant of expected process delays, needed support data and anticipated decision if appropriate. Inspections of permitted uses made where potential for serious damage to the environment exists, where public health and safety could be seriously affected and when permits are reissued or transferred.

MANAGEMENT AREAS AFFECTED: All

### **MONITORING ITEM #32: OCCUPANCY TRESPASS**

PRIORITY - 3

DESIRED CONDITION: Search, locate and record corners when the opportunity exists as a result of other resource projects. Document known unauthorized occupancies as they are discovered. In decade 1, decide how to handle new cases as discovered. Prioritize for resolution, forest management activities or those that can be easily resolved. In decade 2, begin resolution action on all unauthorized trespass cases as they are discovered. Resolve all cases documented in period 1 within period 2.

MANAGEMENT AREAS AFFECTED: All

### **MONITORING ITEM #33: ARTERIAL / COLLECTOR ROAD RECONSTRUCTION**

PRIORITY - 3

DESIRED CONDITION: Reconstruction of arterial and collector roads conforms with the identified needs listed in Table 9 (timber sale purchaser credit) and Table 10 (capital investment) of the Forest Plan.

MANAGEMENT AREAS AFFECTED: All

### **MONITORING ITEM #34: ROAD MAINTENANCE**

PRIORITY - 3

DESIRED CONDITION: Complete road maintenance plans annually for each District. Maintain roads to the maintenance level prescribed in the maintenance plans. Insure that maintenance planed and TIS are in agreement.

MANAGEMENT AREAS AFFECTED: All

**MONITORING ITEM #35: GROWTH REDUCTION AND MORTALITY CAUSED BY INSECT AND DISEASE INFESTATIONS**

PRIORITY - 3

DESIRED CONDITION: Monitor and report insect and disease conditions on a continuing basis and initiate appropriate control methods to insure that infestations do not become epidemic.

MANAGEMENT AREAS AFFECTED: All

**MONITORING ITEM #36: WILDFIRE ACRE PARs**

PRIORITY - 3

DESIRED CONDITION: Number of acres burned by high intensity wildfire which result in substantial damage or loss of resources are within, or below, the projections of the Forest Plan.

MANAGEMENT AREAS AFFECTED: All