

***Klamath National Forest
Fiscal Year 2001
Monitoring and Evaluation Report***

September 23, 2002

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Introduction

The Fiscal Year (FY) 2001 Monitoring and Evaluation Report documents the evaluation of monitoring information from October 1, 2000 through September 30, 2001. These data are compared to data from past years, when appropriate. Monitoring results, rather than the presentation of monitoring data, are emphasized. Evaluations were based on professional judgment when monitoring data was incomplete or lacking.

Monitoring Activities and Evaluation

The following section is organized by Program Areas as they appear in the Forest Plan. Each section identifies program goals, summarizes the monitoring actions related to this program area, and evaluates how well program goals are being met and how closely management standards and guidelines (S&Gs) have been applied. Program Emphasis goals can be found on pages 4-5 through 4-10 of the Forest Plan. Forestwide goals can be found on pages 4-4 through 4-5 of the Forest Plan. Monitoring elements from the Forest Plan Monitoring Plan can be found in Table 5-1 of the Forest Plan on pages 5-11 through 5-14.

Quantitative program accomplishments are not included in this list as they are displayed in other reports such as the Forest's Management Attainments Report.

Physical Environment

Physical Environment

Goals: The goals are to achieve water quality objectives through the use of Best Management Practices (BMPs), mitigate erosional effects, and treat toxic substance hazards.

Monitoring: BMP monitoring follows Regional evaluation guidelines and procedures. Wildfire burned areas are evaluated for unacceptable erosion levels using the Burned Area Evaluation Review process. Monitoring of hazardous materials (naturally occurring asbestos, radon, abandoned mines and landfills, etc.) is done by maintaining an inventory of known and new sites and investigating and cleaning up hazardous wastes/substances present at each site. Safety problems and other reclamation problems are prioritized and projects initiated and completed as funding allows.

Results: FY 2001 represents the tenth year of BMP monitoring on the Forest. A total of 64 sites in 7 categories that include timber, roads, recreation, grazing, mining, fire, and tractor piling were monitored. Eighty-eight percent of the BMP sites were successfully implemented and 95 percent met or exceeded their evaluation criteria for effectiveness. This represents a slight decrease compared to FY 2000 results. Areas in need of improved BMP effectiveness are grazing, road decommissioning practices, and landings. The Jones and Swillup Fires implemented erosion control measures as described in their Burned Area Emergency Rehabilitation reports.

Geology

Goals: The goal for geology is to promote slope stability. The goal for cave management is to be consistent with legal direction. For the purposes of Forest monitoring, more specific goals have been developed and/or applied as listed here: **(1) Life and Property-** Protect human life and property from geologic hazards (landslides, seismic and volcanic events, asbestos dust, radon gas). **(2) Aquatic Conservation Strategy (ACS) Objectives-** "Maintain and restore the sediment regime with which aquatic ecosystems evolved. Elements of the sediment regime include the

timing, volume, rate and character of sediment input, storage, and transport". Emphasis is placed on minimizing management-related landslides and maintaining natural slope stability. **(3) Unique Geologic Areas-** Protect and maintain unique geologic resources (caves, Special Interest and Research Natural Areas). **(4) Restoration-** Restore areas damaged by previous human activity (such as abandoned mines, or sediment-producing roads). **(5) Geologic Resources-** Ensure that geologic resources (rock aggregate and earth materials, locatable minerals, groundwater) are developed in a cost-efficient and environmentally sound manner.

Monitoring: **(1)** Systematic monitoring of landslides, through field visits and air photo inventories, is conducted only after landslide episodes (primarily after precipitation events). Similarly, the effects of seismic/volcanic activity are monitored only after the occurrence of such events. In the absence of such events, monitoring is limited to collecting information by field personnel. Asbestos is monitored by sampling of proposed aggregate or rip rap sources for asbestos content, and sampling of air in the vicinity of earth disturbing activities in asbestos-bearing earth materials. **(2)** ACS objectives related to sediment and geologic S&Gs directed at landslide mitigation are reviewed on individual projects. **(3)** The condition of cave resources over the past 5 years has been monitored primarily by the Klamath Mountains Conservation Task Force and the Shasta Area Grotto; the Forest Service has monitored only a few caves. Cave features and formations are visually monitored for damage, and bat usage is monitored in selected caves. **(4)** Restoration monitoring includes a determination of the amount (miles or number of sites) and the effectiveness of road decommissioning and road restoration work including landslide stabilization, and reclamation of abandoned mines. **(5)** Earth Materials developments and groundwater withdrawal sites were not monitored in 2001.

Results: **(1)** There were no landslide-producing storms, seismic or volcanic episodes in 2001; and no reports of adverse effects reported by field personnel relative to these hazards. An inventory of asbestos-bearing rock sources was initiated in 2001 and is scheduled for completion in 2002. Refer also to **Air Quality** section for discussion of new asbestos requirements.

(2) As no significant management-related landslides were reported by District or Supervisor's Office personnel in 2001, ACS sediment regime objectives were most likely met in 2001. Geologists routinely work on soil and earth disturbing projects and delineate unstable lands in the field. Individual project reviews tend to indicate that S&Gs are being applied and are effective.

(3) Cave use has been increasing over the past 5 years. No significant damage from vandalism has been identified in the monitored caves with the exception of Pluto, Barnum, and Sand caves, where spray can graffiti continues. Bat usage increased in Barnum cave following the installation of a gate to exclude humans during the winter of 2000. A bat gate was installed in Sand Cave in the fall of 2001.

(4) In FY 2001, the Forest took credit for decommissioning 44.75 miles of system roads, and 6.14 miles non-system roads for a total of 50.89 miles. Salmon River District decommissioned 4.77 miles of system roads and 6.14 miles of non-system roads. Happy Camp District decommissioned 34.29 miles of system roads. Scott River District decommissioned 5.69 miles of system roads. These figures relate to the year the project was funded and some of the work will be completed in FY 2002. More than 10 miles of the decommissioned roads were monitored without revealing any significant landslide problems. Implementation success was relatively good. Due to the lack of landslide-producing storms in 2001, the effectiveness of road decommissioning and restoration could not be assessed. The Forest reclaimed four abandoned mine areas in 2001, installing 5 bat gates in mine adits.

(5) One application for a Special Use Permit was submitted for groundwater withdrawal from lands administered by the Goosenest Ranger District near County Road A-12.

Soils

Goals: The goals are to maintain soil productivity and reduce management-related soil erosion.

Monitoring: The attributes monitored are soil cover for erosion protection, fine organic matter for nutrient cycling, coarse woody debris for biological activity, and soil compaction for root growth. Standardized sampling methodologies developed on the Forest are used to collect the data.

Results: Achievement of Forest Plan recommended soil cover guidelines in managed stands has stabilized in the mid-80 percentiles (83%) for total soil cover and continues to be fully met for fine organic matter (100%) for fall broadcast burn/underburn prescribed fire units. Monitoring of stands where small diameter standing trees and logging slash have been masticated (cut into small pieces by machinery), which started in 2001, found that 88% or more total soil cover was being retained.

Areas that fell below the recommended guidelines in the fall underburn program will be examined and options explored to improve the achievement of soil cover guidelines in future projects. A strategy has been developed to determine the appropriate amount of soil cover for areas burned by wildfire that would have follow-up fuel reduction treatments.

Water Quality

Goals: The goals are to provide adequate instream flows, and to maintain water table levels in wet meadows.

Monitoring: The BMP program and the ACS are the primary mechanisms for ensuring the maintenance of water quality. BMPs are monitored as described under **Physical Environment**. ACS monitoring is described in the **Geology** and **Aquatic Conservation Strategy** sections. The water quality-monitoring element is tied to the **Physical Environment** goal of achieving water quality objectives.

There are no monitoring elements in the Forest Plan Monitoring Plan for providing adequate instream flows and maintaining water table levels in wet meadows. The Forest manages flows for domestic use, but does not control flows on rivers controlled by dams such as the Klamath River or flows on the Scott River within Scott Valley. Stream flows on the Klamath and Scott Rivers are monitored by other agencies.

Results: Refer to the **Physical Environment** section for a discussion of water quality results.

Air Quality

Goals: The goals are to comply with legal requirements, and to manage prescribed fire to avoid prolonged air quality impacts to local communities. Legal requirements include the Federal Clean Air Act and the State Air Quality and Smoke Management Standards and Regulations

Monitoring: Annual visibility data are collected via a camera mounted at the Lake Mountain lookout to assess effects on the Marble Mountain Wilderness Class 1 Airshed. Photographs were taken from July to October from 1998 to 2001. Other monitoring includes smoke plume monitoring during prescribed fire projects, recording complaints received during prescribed fire projects, and reviewing yearly air quality data from permanent sampling stations in Siskiyou County. Monitoring of compliance with the new Asbestos Toxic Control Measure consists of: evaluating the geology of quarry sites in ultramafic rocks, testing for asbestos, and discontinuing use of any aggregate with detectable asbestos content.

Results: Photograph records of visibility monitoring have been compiled and organized for the last four years, which will allow trends to be identified. Consistent with the new 2000 Smoke Management Regulations in California, Smoke Management Plans are submitted to the Siskiyou County Air Pollution Control District in order to obtain a permit to burn. This process was first used in the fall of 2000, and post burn evaluations indicate that there were no smoke impacts to sensitive areas. Air quality data compiled by the California Air Resources Board indicates that air quality with respect to particulate matter (PM₁₀) has improved from 1996 to 2001. Forest management activities, such as prescribed burns, have not exceeded state or federal air quality standards. Wildfires in 2001 created numerous days of poor air quality, but standards were not exceeded. The new Asbestos Toxic Control Measure was adopted in November 2001, and is too

new to be fully evaluated. The on-going Forest rock resource inventory will provide information on what existing rock pits contain asbestos minerals. The inventory is planned for completion in 2002.

Biological Environment

Biological Environment

Goals: The goals are to manage for healthy ecosystems, provide goods and services in an environmentally sound fashion, use new knowledge, develop an integrated inventory, cooperate with other agencies, and promote awareness and appreciation of species.

Monitoring: The Northwest Forest Plan (NWFP) initiated a management scheme which, applied over time, should result in healthy ecosystems. Monitoring of management actions is completed annually as part of the Forest Plan Implementation monitoring program conducted in a consistent manner throughout the range of the NWFP. Results of the Forest's involvement in that program are contained in annual NWFP reports.

Monitoring for terrestrial species and ecosystems included a review of annual Program Of Work documents, project proposals and associated funding levels, discussions with wildlife biologists on the Forest, field survey results, and technical reports completed through Forest staff efforts. Analyses such as the Draft California Northern Spotted Owl (NSO) Baseline Analysis, the Forestwide Late-Successional Reserve Assessment, the National Council Air and Stream Industry NSO study, and landbird monitoring provide the best assessments of the status of late successional habitat conditions and species associated with those habitats. Results from the FY 2000 Strategic Surveys for mollusks are contained within reports by Dr. James Agee and Dunk-Zielinski-Preisler.

Monitoring for fisheries and aquatic ecosystems consisted of a review of Forest Plan goals, S&Gs, national program goals, action items established by the 1995 Recreational Fisheries Executive Order, and Threatened, Endangered, and Sensitive (TES) listings of anadromous salmonids that occurred since the adoption of the Forest Plan.

Sensitive species are currently tracked through pre-project surveys and/or habitat reviews. Data on new plant populations are entered into the corporate plant layer. Additions and deletions to the sensitive plant list occur at the Province and Regional level using input from Forest Botanists.

Management Indicator Species include some common species and some species listed as TES. Effects to Management Indicator Species are evaluated through a review of effects of project level activities on habitat conditions. The Forest relies on monitoring efforts conducted by the State, research groups (private and federal), Universities, and the Landbird monitoring conducted through partnerships with qualified groups to ascertain current habitat conditions and species presence.

Information on stand density control projects, which includes pre-commercial and commercial thinning, within Late-Successional Reserves was compiled.

Results: The NWFP is a long-term strategy (100 years) and has not been in effect long enough to validate its success in maintaining healthy ecosystems. At the Forest scale, fuel loadings, mortality, and overstocking have been increasing. Management options for dealing with these issues are limited. Over the last five years the trend has been towards more restrictions on use of active management, both through application of restrictive S&Gs, and through limitations outlined in appeals and litigation.

The Draft NSO Baseline study indicates that most Late-Successional Reserves are functioning for NSOs (those that are not are at the edge of the range, or in interspersed land ownership patterns).

Training levels for biologists have declined over the last five years, which limits the Forest's ability

to “swiftly translate new knowledge” and achieve the goal of technology transfer.

The Forest has not developed an integrated inventory system. The implementation of the FLORA and FAUNA corporate databases may facilitate integration.

Coordination with other agencies has been increasing over the last 5 years, and cooperation (in consultation and project development and implementation) is generally good.

Promoting awareness of species is ongoing, with Forest personnel involved in a variety of environmental education projects throughout the County, the annual Wildflower Show, Siskiyou Golden Fair, noxious weed awareness, etc.

Since 1994, pre-commercial thinning has been planned on 11,242 acres within Late-Successional Reserves and completed on 5,217 of those acres. Commercial thinning (thin/chip) has been planned on 485 acres and completed on 438 of those acres. Stocking density has been controlled on a total of 5,655 acres in Late-Successional Reserves with the objective of increasing growth on the leave trees to move towards late-successional conditions faster. With the use of National Fire Plan funding, several other projects are in the early planning stages to reduce fuel build-ups in Late-Successional Reserves.

Biological Diversity

Goals: The goals are to manage for healthy, diverse ecosystems and species habitat. In the past this has led to an emphasis on the Forest to conduct activities that are consistent with achieving recovery of TES aquatic species. It should be noted that recently, project-level development and maintenance of TES species habitat has been de-emphasized in deference to determining the status of and risks to Survey and Manage species.

Monitoring: Monitoring activities are the same as for the **Biological Environment**. The monitoring element for sensitive plants is to assure maintenance of populations. For late-successional and old growth species, monitoring elements are to track vegetative changes and ensure openings are consistent with requirements.

Results: See discussion under **Biological Environment**. Because Forest management direction favors TES terrestrial species, habitat for TES is tending to improve through the use of S&Gs except in some areas in the matrix. The Draft NSO Baseline study indicates that most of the Late Successional Reserves on the Forest are functioning adequately for NSOs.

The implementation of the Survey and Manage management recommendations in the short term seems to have created a single species management approach rather than a broader ecosystem management approach for terrestrial species. This shift was not predicted or expected at the level currently occurring. Vegetative changes have not been tracked at the Forest scale. Few openings have been created through management activities.

Pre-project surveys for sensitive species are adequate and conducted within designated time frames. The database is updated on a yearly basis. Additions and deletions to the sensitive plant species lists are made as needed. Known sites are protected.

Aquatic Conservation Strategy

Goals: The goals are to maintain and restore all components of the aquatic ecosystem.

Monitoring: Monitoring consisted of a review of S&Gs, the BMP Evaluation Program, and project level NEPA. Refer also to the **Physical Environment** and **Geology** Sections.

Results: BMP monitoring has shown that project-level planning often fails to identify the specific BMPs applicable to the proposed activity, and the specific project level actions or mitigation necessary to meet BMP implementation. Improvement was noted in 2001 with respect to developing and linking project level design standards to applicable BMPs.

Evaluation of selected road decommissioning projects identified a need for common procedures for evaluating resource costs and benefits as well as a common definition of required outcomes

defining decommissioning (Appendix A of FS Publication FS-643). Observations of field operations by Forest Service or Purchasers in “putting temporary roads to bed” found that the standards identified in the Forest Road Decommissioning Policy are not being met (i.e. retention of features regarding maintenance). Substantial improvement in applying Forest Road Decommissioning Policy guidelines has been observed in 2001 project reviews. Evaluations still indicate additional attention to addressing obliteration of the initial road segment is warranted in order to discourage further road use. Placement of rolling grades can be improved by coordinating installation with existing swales and draws versus fixed distant placement. “Daylighting” road through cuts whenever practicable in order to minimize concentrating water is also a practice that needs to be consistently applied.

A review of road construction and decommissioning in key watersheds showed a net decrease in road mileage. However, monitoring has identified areas where road construction and decommissioning are not being reported to the Forest, which could affect net road miles.

A review of Cumulative Watershed Effects (CWE) analyses in watershed analysis and in projects found that there are inconsistencies between documents. The CWE process has been evolving over the last five years and consistency in model application of CWE results through environmental analysis is improving. Improving consistency through disclosing and applying CWE assessment assumptions remains a pitfall to achieving repeatable interpretations. Preparation of Forest standards for direct effects, indirect effects and CWE is warranted.

Wildlife

Goals: The goals are to coordinate habitat improvement with the California Department of Fish and Game and to maintain unique wildlife habitats.

Monitoring: Monitoring activities are the same as for the **Biological Environment**.

Results: Limited monitoring of peregrine falcons and bald eagles indicates improvement in achieving 1990 RPA goals. Peregrine falcons, which have a Resource Planning Act (RPA) goal of 14, average 13 pairs. Bald eagles with an RPA goal of 5, average 10 pairs. Over the last five years, some suitable habitat for NSO has been rendered unsuitable by timber harvest and wildfires, without equal regrowth in the short period. Ongoing studies of populations of NSO, marbled murrelet, frogs, fungi, various landbirds, goshawk, and Swainson’s hawk are in progress, but monitoring results are not yet conclusive.

Coordination with the State has declined over recent years; the focus has shifted to coordination with other Federal agencies (Fish and Wildlife Service and National Marine Fisheries Service). Coordination with the State continues on elk habitat and meadow enhancement through Challenge Cost Share agreements and the Knutsen-Vandenberg program, but at a reduced level. The purchase of Orr Lake and the Butte Valley wetland development are recognizable wildlife habitat improvement achievements that were successful due to partnerships with private, State, and other federal entities. The program’s attention to big game and big game habitat enhancement increased over the last few years. Funding was received from Rocky Mountain Elk Foundations for three projects that have habitat improvement objectives integrated with fuels reduction objectives. Two projects were on the Scott River District and one project was on Happy Camp.

The Forest did a review of monitoring efforts of Management Indicator Species. Almost all species have some inventory and/or monitoring data available. It appears that some Management Indicator Species are not easily monitored and there isn’t a clear link between some species presence or abundance and changes in habitat conditions.

Fisheries

Goals: The goals are to coordinate management and increase public awareness and appreciation of aquatic resources.

Monitoring: Monitoring consisted of a review of Forest Plan goals, S&Gs, national program goals, action items established by the 1995 Recreational Fisheries Executive Order (RFEO), and numbers/types of public awareness activities.

Results: The Forest participates in cooperative agreements or activities with a variety of agencies and groups, including the Karuk and Yurok tribes, Klamath Basin Fisheries Task Force, California Department of Fish and Game, the Scott River Coordinated Resource Management Partnership, the Salmon River Restoration Council, Humboldt State University, Fish and Wildlife Service, and National Marine Fisheries Service.

The Forest has been responsive to some of the RFEO action items. RFEO targets are emphasized in annual budget direction. There are no goals and S&Gs for RFEO activities in the Forest Plan.

Review of road crossings associated with fish bearing streams indicates few road barriers for anadromous fish exist, although several road barriers on resident streams were observed. Because some of the barriers were noted at recently (< 2 year old) reconstructed road crossings, additional interdisciplinary evaluation of project designs for fish passage is warranted.

Public understanding of fisheries issues has increased over the last five years. This is partially due to Forest participation in numerous activities designed to increase public awareness of fisheries values, including the Klamath Provincial Advisory Committee, the Salmon River and mid-Klamath River annual fish counts, and support of National Fishing Week activities. In addition, the Forest provides environmental education at the high school level, where technology transfer occurs for fisheries-related issues.

Resource Management Programs

Resource Management Programs

Goals: The goals are to integrate resource needs through analysis and planning, to cooperate between resource programs to reduce costs and improve efficiency, and to develop consistent approaches for determining conditions and projecting effects.

Monitoring: The assessment of goal achievement was based on a review of large-scale analyses completed and a review of selected project documents.

Results: A Wildland Fire Management Strategy for the Forest was drafted during FY 2001 and analysis was completed in December of 2001; the document is published and ready for distribution. This strategy will allow the Forest to use wildland fire to achieve resource goals as was identified in the Forest Plan.

A Forestwide Road Analysis Process was initiated in FY 2001 and has been completed in FY 2002. This analysis looks at the primary road system for the Forest and develops a process for determining benefits, problems, and risks relating to individual roads. This information will help in prioritizing roads for construction, improvement, and closure.

The Forest has a Forest Late Successional Reserve Assessment that was completed in January of 1999. About 83% of the Forest is covered by completed ecosystem analyses using the watershed analysis process, including an Adaptive Management Area Ecosystem Analysis. All key watersheds are covered except for Wooley Creek, which is in the wilderness and not considered a high priority because of the limited management actions that could take place there.

The Forest continues to show improvement in using the opportunities identified in these large-scale assessments as a purpose for considering projects. Documentation of these links is also improving, especially in the larger and more controversial projects.

The Forest shows improvements in coordinating multiple resources projects in the same geographical area to achieve desired conditions and minimize costs.

Visual Resource Management

Goals: The goals are to conserve natural scenic character, meet Visual Quality Objectives, emphasize views from key viewing areas, conserve especially attractive landscapes, and rehabilitate areas not currently meeting standards.

Monitoring: The assessment of goal achievement for the Scenery Conservation Program was based on professional judgment of scenery specialists, public comments, and information from Regional and Forest Scenery Managers.

Results:

Scenic Character is the Forest's unique visual identity and image. Character has been enhanced in relatively small areas, through vegetation projects that enhance and sustain the Forest's native appearance. Many more acres are in need of similar stewardship work. Widespread stewardship actions for large areas of the Forest when coupled with fuel reduction activities would decrease the risk for natural disturbances of large scale and high intensity, which has the potential to diminish the socially valued scenic character.

Scenic Integrity is the degree of natural appearance in the Forest. Adverse effects to integrity are less frequent and less prominent in the last several years as the intensity of vegetative treatment has decreased. Although some adverse integrity impacts still occurred, project effects were mitigated to achieve Forest Plan integrity objectives (Visual Quality Objectives). Some existing scenic integrity effects will persist for many years.

The Forest's Scenery conservation program is typically focused on the more complex and sensitive projects. Scenic quality often is not optimized due to trade-offs with other resource needs. Progress in achieving scenery goals in Forest social and recreation settings is slow due to a low level of funding. The Forest Landscape Architect is currently assisting the Pacific Southwest Region in formalizing direction on how to implement the Scenery Management System, which is a revision of the Visual Management System. Some Scenery Management System principles have been applied on the Forest for several years. Greater Scenery Management System application to projects will occur through inventory updates.

Recreation Management

Goals: The goals are to support communities' diversification efforts, to offer a wide range of attractions, to design developed sites to support recreationists in off-site activities, to provide barrier-free access, and to implement recreational strategies.

Monitoring: The assessment of goal achievement for the Recreation Program was based the professional judgment of recreation specialists, public comments, and information from Regional, Forest, and District Recreation Managers.

Results: Recreation use and demand appears to be experiencing a small, steady growth. Use is concentrated at rivers, lakes, wilderness, and backcountry areas. Uncrowded and ecologically rich settings are the Forest's unique, unsurpassed recreational assets.

The Forest is maintaining its rich, attractive recreation settings, and making small recreation facility improvements that retain valued natural character, increase visitor satisfaction, and contribute to local tourism income. This supports local communities' diversification efforts. Eighteen modern, accessible toilet facilities were installed this year at seven developed recreation sites, and similar plans were funded for six more sites in 2002. Interpretive information stations at two river access locations along the State of Jefferson Scenic Byway are planned for FY 2002; this is expected to enhance the recreational experience, increase visitor satisfaction, and increase referrals to potential visitors.

The Forest continues to increase the availability of its attractions and facilities suitable for non-traditional recreation visitors such as children, the elderly, and people with mobility impairments. One major riverside campground, Curly Jack, received renovation to increase site accessibility and to better serve large groups and large recreational vehicles. The Forest participated in a

national forest visitor survey, conducting 200 survey days at recreation sites across the forest to identify information about forest visitors and recreation preferences. Information from the survey will be developed in 2002 to identify forest visitor profiles, recreation activity and facility preferences, duration and location of visits, participation/use levels of various recreation activities on the forest, spending patterns, etc. This information will help the Forest better understand and serve its visitors.

The Forest continues to invest money in high demand/high priority developed recreation sites. These sites almost always support off-site recreational experiences such as rivers, lakes, trails, and the backcountry. Recreational facility cost information was refined this year to better identify costs/benefits of individual sites to satisfy public preferences. Priority sites were included this year in the national cost recovery program, enabling visitor fees to be used at the sites where they were generated to meet visitor needs.

Progress continues on the Forest Accessibility Action Plan of 2000, which defined and prioritized barrier removal for its 192 recreation sites. Complete achievement may take over 20 years. The Forest is strategically identifying, acquiring funding for, and planning recreation projects that remove barriers to people with mobility and other disabilities. Nine of the toilet facilities mentioned above provided accessibility to recreation sites where none existed before. The major recreation activities offered by the Forest are fishing, hiking, boating, camping, and wilderness/equestrian. At least one location for each activity type has been made barrier free and facilities at those sites have received additional support facilities this year. New facility improvements are balancing optimal access for people with disabilities and conservation of onsite natural setting characteristics.

The achievement of the recreation program goals discussed above is consistent with the National, Regional, and Forest Recreation Strategies. The 1993 Forest Recreation Strategy has been reviewed, several improvements recommended, and will be updated in 2002.

Wilderness Management

Goals: The goal is to maintain or enhance wilderness values.

Monitoring: The assessment is based on the professional judgment of wilderness specialists, public comments, and information from Regional, Forest, and District Recreation Managers.

Results: Wilderness use is primarily by recreationists and grazing permittees. Use levels are generally light compared to other wildernesses in the Region. Use may be slightly increasing.

Resource effects are primarily due to recreational visitors, grazing use, and fire suppression activities. Few trailheads provide information about recreational opportunities and wilderness resource conservation measures. Public complaints about the presence and impacts of cattle grazing on aesthetics and ecosystems are common. The Forest's Wildland Fire Management Strategy, completed in December 2001, provides criteria for determining when to allow wildland fire to burn to achieve resource goals in wilderness, rather than always suppressing it as in the past. The availability of this new tool is expected to help reduce fuel build-ups created as a result of past fire suppression.

Campsite repair work occurs annually, including cleanup, restoration, and trash removal from fragile areas. The extent of exposed mineral soil and loss of native vegetation at many campsites indicates that degradation is occurring. Limited trail work also occurs each year, including surveys, maintenance, and reconstruction. Due to limited budgets, many trails do not meet the standards for clearing, logging out, tread maintenance, signing, and trail logs. Direction on how to achieve trail/trailhead accessibility standards to serve people with mobility disabilities has been delayed due to federal judicial processes beyond control of the Forest Service. Some roads and other inconsistent features within wilderness provide opportunities for wilderness rehabilitation.

Management decisions regarding acceptable limits of key attributes and values, appropriate land use zoning, and resource emphases are often made informally, frequently lacking the support of coordinated plans or professionally established analysis methods. Baseline ecological values for

each wilderness need to be identified so strategies to maintain those key values can be developed.

Wild and Scenic River Management

Goals: The goal is to maintain and enhance the outstandingly remarkable values and free-flowing conditions of the Wild and Scenic Rivers (WSRs).

Monitoring: The assessment is based on professional judgment of WSR specialists, public comments, and information from Regional, Forest, and District Recreation Managers.

Results: In general WSR values appear to be in very good condition, but some WSR segments have problems with TES anadromous fisheries health and, for at least one, commercial whitewater boating is near social threshold.

WSR considerations are becoming a more prominent element of program planning and project implementation. Regional and Forest WSR activity has increased this past year, in part due to the hydropower relicensing effort, and in part due to the Region's coordination with agencies and forests to establish a system to complete WSR Act Section 7 compatibility determinations for public and private projects. There is a need for more people skilled in conducting these types of determinations. Studies performed as part of the hydropower relicensing work, such as Klamath River whitewater rafting, angling and flow preference information, may provide information useful in maintaining and enhancing WSR values.

Specially Designated Area Management

Goals: The goals are to recognize special areas and values, provide information about these areas, develop partnerships for research within Research Natural Areas, and promote interpretive opportunities within Special Interest Areas.

Monitoring: Special Interest Areas are monitored through field visits as opportunities arise. The Geologic Research Natural Areas that are caves are monitored as described above in the **Geology** section.

Results: Geologic Special Interest Areas and Research Natural Areas have received limited emphasis.

Lands Program Management

Goals: The goal is to achieve a land ownership pattern that improves management options, while reducing conflicts and administrative costs.

Monitoring: Program accomplishments were examined and compared to the goal. Specific lands transactions were used to indicate the accomplishments and were compared to goals stated in the updated Landownership Adjustment Plan.

Results: This program is somewhat opportunistic in character, in that the Forest must negotiate transactions with willing landowners to be successful. Thus lands are identified either for acquisition or disposal, and then action is taken when such owners cooperate with Forest managers. Over the past five years, the Forest has completed a number of land exchanges and purchases, which have resulted in a more solid, compact ownership pattern of National Forest System lands. Such actions reduce administrative costs (fewer road rights-of-way required, fewer miles of property boundary to locate and mark, and to maintain). These actions also contribute to more management options with regard to protection of resources, and reduce conflicting uses by other landowners (such as inappropriate timber harvest, over-grazing, etc.). The program also contributes to Region 5 goals for the Lands program.

Minerals Management

Goals: The goal is to manage mineral exploration and development of surface resources to maintain environmental quality.

Monitoring: Minerals operations for locatable minerals are controlled by the surface use regulations. A mineral administrator periodically visits operations to insure compliance with the approved plan of operations. When operations are found without approval, operators are informed of the need to comply and given a deadline. Citations are issued for failure to comply. Timely reclamation of mining operations is occurring as a result of the program.

Results: The trend is for fewer commercial mineral operations because of declining gold prices and more difficult environmental standards. The trend for saleable minerals is steady, with an anticipated increase in demand as private sources are exhausted. As directed by a letter from the Washington Office for FY 2001, 100 percent of minerals operations were administered to standard.

Transportation and Facilities Management

Goals: The goals are to provide an economical, safe, and environmentally sensitive transportation system; emphasize maintenance and restoration over new construction; and provide safe and effective administrative sites and facilities.

Monitoring: Much of the work in Transportation Management is routine in nature and done strictly within established BMPs. However, program activities are currently monitored under forest resource programs, with support and cooperation from Engineering. The Transportation staff works closely with Forest Resource personnel to identify road related projects that will improve watershed health and mitigate potential resource impacts. All facilities are inspected for condition on a recurring basis. The Engineering staff utilizes comprehensive codes and regulations to ensure proper planning, maintenance, construction and accessibility upgrades are accomplished.

Results: The 2001 Road Accomplishment Report shows that 256 miles of road were fully maintained and 1601 miles were partially maintained. This exceeded the 521 miles/year for maintenance projected in Table 4-1 of the Forest Plan. No new roads were constructed, which is well below the 10 miles/year projected in the Forest Plan. In addition, a total of 51 miles of road were decommissioned, several miles of road were out-sloped or rocked, fills were reduced or eliminated and larger culverts were installed. Every effort is being made to complete all work on the ground using established BMPs, which are routinely monitored by Engineering Inspectors and Resource staff. An ongoing and very successful collaborative effort with the Aquatic Resource Program focuses on combining road and resource funding to complete road related key watershed improvements. Failed road sections are being repaired to the maximum extent possible using less fill volume, reinforced fills, armoring, and larger culverts to minimize the potential for future environmental damage.

During 2001, progress continued towards improving employee and public safety, comfort, convenience, and accessibility of facilities. Highlights include installation of 18 new accessible vault toilets at various locations, purchase of two additional water treatment units to improve drinking water at Petersburg Station and Sara Totten Campground, two new leased barracks at Fort Jones and Mt. Hebron, award of a forest-wide contract to evaluate California Conservation Crew era structures and rehabilitation of the Slater Butte Lookout. The required facility condition surveys were completed and entered into a nationwide database. The Facilities Master Plan update began and will be completed by the end of 2002. The deferred maintenance backlog is significant, but meaningful progress is expected in the future as funding levels are projected to increase with the implementation of a new program for collecting maintenance funds from facility occupants.

Timber Management

Goals: The goals are to implement silvicultural prescriptions to achieve desired conditions, reforest Matrix lands within 5 years, offer the Allowable Sale Quantity, utilize dead and dying trees, implement post-sale treatments, and manage insects and disease.

Monitoring: The annual Planned Timber Sale Accomplishment Report has been used for assessing the Allowable Sale Quantity goal. The reforestation and Timber Stand Improvement program goals are assessed each year by comparing accomplishments to targets, particularly for survival and certification of planted stands. The results are documented in the Stand Record System and the yearly Plantation Survival Report.

Results: The Forest continued its efforts to meet timber targets assigned by the Region. With the settlement of some court cases and the issuance of the Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines in January 2001, the Forest was able to offer and sell several sales during FY 2001. The majority of the sales involved commercial thinning and salvage. The Forest still struggles developing Green Tree Retention prescriptions for most of its program. Forest Plan modeling identified Green Tree Retention as the primary prescription for the program. For the first time in several years the Forest was funded at a level lower than the Allowable Sale Quantity. The Bark Fire was successfully salvaged and rehabilitation efforts are now underway.

The Forest continues to emphasize timber stand improvement activities. Treatments include a combination of treating older plantations and younger plantations. Accomplishments are completed using both trust funds and appropriated funding. Integration with the fuels program is continuing with emphasis on treating stands to reduce fuel hazards. The reforestation program continues to decline due mostly to the lack of regeneration harvesting. Most of the reforestation efforts are confined to interplantings of understocked plantations and the reforestation of wildfires. Survival rates are still in the acceptable range. Animal damage efforts have concentrated on controlling gopher and deer problems on some of the younger plantations.

Fire Management

Goals: The goals are to reintroduce fire into the environment, reduce unacceptable fuel buildups, use the appropriate minimum impact suppression methods for wildfires, and develop management and protection strategies for intermixed state and private lands.

Monitoring: Management Attainment Reports were used in determining if acre targets were achieved. When implementing prescribed fire projects, smoke management plans are coordinated with the local Air Pollution Control District to assure that smoke management guidelines are met; refer also to **Air Quality** section.

Results: The Forest's Wildland Fire Management Strategy, completed in December 2001, includes a Decision Criteria Checklist that will allow a determination of when wildland fires should be allowed to burn to achieve resource goals. This will allow more progress to occur in reintroducing fire to the environment.

The Forest Plan projected output for natural and activity fuel treatment is 27,108 acres per year for the first decade. The total fuel reduction acreage increased each year from 6,951 acres in 1996 to 19,492 acres in 1999, falling to 12,081 acres in 2000 and 10,496 acres in 2001. The reduction in acres treated in 2000 was due to a moratorium after the Los Alamos prescribed fire escape in New Mexico. The "window of opportunity" (weather parameters) for prescribed fire in 2001 was very narrow, so more expensive mechanical treatment was applied with a corresponding decrease in acres treated. Management constraints such as air quality and survey requirements also cause fluctuations in accomplishment acres; however progress in reducing unacceptable fuel buildups continues to be made.

The initial attack workforce for fire suppression is increasing as part of the National Fire Plan's direction to moving towards the "most efficient level." This will help to reduce the potential of large and high severity wildfires.

Range Management

Goals: The goals are to provide healthy ecosystems, make forage available on a sustainable basis, not retard or prevent attainment with Aquatic Conservation Strategy Objectives, and provide forage to support big game objectives with meeting current livestock forage allocations.

Monitoring: Monitoring included the assessment of annual utilization and Annual Operating Instruction effectiveness, specific riparian area monitoring, and long-term monitoring of vegetation changes at five-year intervals. Monitoring of randomly selected allotments occurs each year for allotments with an Endangered Species Act determination of "may affect, likely to adversely effect" for coho and steelhead salmon, for Range BMP monitoring, and for Forest Plan S&Gs.

Results: Allotment monitoring indicates movement towards the goals of providing forage for livestock and wildlife on a sustainable basis while managing grazing activities to meet Aquatic Conservation Strategy Objectives. The assessment of long-term condition indicates that range condition is improving.

Wild Horse Management

Goals: The goal is to manage for one viable wild horse herd. The population goal for the Three Sisters Herd is 10 head, while the goal for the McGavin Peak herd is 0.

Monitoring: A census of total numbers, sex, and age class allows annual population estimates to be made. Population numbers are monitored and horses in excess of the population goal are removed.

Results: In 1995, the population estimate for McGavin Peak herd was 80 animals and Three Sisters 20. Capture efforts have removed 71 animals from the McGavin Peak herd and 15 animals from Three Sisters. Current estimates are 40 head for McGavin Peak and 15 for Three Sisters. The focus of the capture effort is on the McGavin Peak herd.

Heritage Resource Program

Goals: The goals are to sustain a progressive Heritage Resource Program, inventory known cultural sites, and to determine the significance of each site.

Monitoring: Two types of monitoring occur that are related to Section 106 and Section 110 of the National Historic Preservation Act. As part of the review process for Section 106, historic properties that are potentially eligible and sites that are on the National Register of Historic Places are located and protected during project planning. After project completion, sites are monitored to ensure that the protection was adequate. As part of the evaluation process of properties eligible for nomination to the National Register of Historic Places for Section 110, the condition of properties is monitored and evaluated. Monitoring data is reviewed each year as part of these two processes, including the number and acreage of pre-project surveys, the number of sites interpreted, the number of cultural education classes held, and the number of tribes consulted.

Results: In FY 2001, the Forest sponsored a course in Federal Historic Preservation Law for the Forest Service, presented by members of the Advisory Council on Historic Preservation. The course identified the responsibilities of Federal agencies for all federal actions, emphasizing Section 106 compliance. The course was well attended by Forest employees and members of local tribal groups and helped raise consciousness about legal obligations.

The Forest's Section 110 Monitoring Plan, which was revised in FY 2000, established a higher minimum number of sites to be evaluated annually to determine significance.

As a result of the above actions and other efforts, the Forest was included in the Programmatic Agreement for Compliance with Section 106 of the National Historic Preservation Act for undertakings on the national forests of the Pacific Southwest Region in FY 2001. This agreement between the State Historic Preservation Office and the Region facilitates the review of historic properties under Section 106.

The Forest has entered past archaeological data and new data obtained in 2001 into a national database and a Geographical Information System.

Tribal Government Program

Goals: The goals are to improve relationships with Indian people, develop partnerships with local Native American organizations, and emphasize increased understanding, communication, and partnerships with Indian tribes, organizations, and communities.

Monitoring: Monitoring consists of tracking the actions taken to improve relations with tribal groups.

Results: Every year the number of contacts with federally recognized and non-federally-recognized tribes increases as the tribes become more politically active. With the development of mutual respect, relationships continue to improve. Agreements are developed and revised as necessary with the federally recognized tribes. In 2001 the Klamath formalized government-to-government relations with the Yurok Tribe and increased contact with the Hoopa Valley Tribe and Pit River Tribe.

There has been continued success in forming partnerships with the Karuk Tribe with a fire protection fuels reduction project at Happy Camp in addition to the mushroom and fire Memorandum of Understandings that previously existed.

Coordination with the Karuk Tribe of California; the Klamath Tribes; Shasta Nation/Shasta Tribe, Inc. (Yreka); the Quartz Valley Indian Reservation; the Pit River Tribe; the Yurok Tribe; Shasta Nation, Inc.; Confederated Bands of the Shasta and Upper Klamath River Indians (Macdoel); and the Forks of the Salmon Indian Council continued this past year.

Social and Economic Environment

Social and Economic Environment

Goals: The goal is to develop partnerships with local and regional groups to emphasize environmental education, public awareness, and knowledge about Forest processes. Although not specified in the Forest Plan, the law provides a Civil Rights goal, which is to incorporate non-discrimination and fairness into every program and process within the Forest. This is done through the development of partnerships with local and regional groups to emphasize environmental education, public awareness, and knowledge about Forest processes.

Monitoring: The goals were assessed through a review of all other programs. Classroom hours and program dollars have been used as indicators for environmental education. Information is not currently aggregated at the Forest level for employee participation in Conservation Education with external groups. However, various program areas contribute a portion of their budgets toward attainment of this national emphasis item. For Civil Rights, the number of complaints received, number of accomplishments in the Civil Rights Implementation Plan, number of programs

represented in Title VI reporting, and number of employees attending training and briefings were reviewed.

Results: Efforts in cooperating with other agencies, organizations, tribes, and individuals are ongoing. The Forest cooperates with numerous partners in aquatic and terrestrial restoration projects; in surveying wildlife, fish, and rare plant habitat; in flood repair projects; in monitoring cave resources; and in maintaining snowmobile facilities. The Forest also provides environmental education programs for students and other groups in a number of resource areas. Extensive coordination and cooperation has occurred with numerous tribes (see above). The Forest in cooperation with other groups and agencies has assisted in securing Rural Development grants, in creating job opportunities and in placing workers through the Rural Development and Community Development programs.

Many Forest employees enthusiastically participate in Conservation Education programs in cooperation with the public schools by contributing their time and expertise in indoor and outdoor classroom education. Some resource programs contribute heavily, while others do not. Siskiyou County Public Schools personnel are conducting workshops with agency representatives and specialists to develop curriculum in various resource fields to satisfy their educational requirements. This curriculum needs to be developed to also meet Forest Service agency needs for content and resource area emphasis in line with the national program direction.

The trend in Civil Rights over the last 4 to 5 years is towards fewer complaints. Indications are that the increased amount of training and the establishment of the Civil Rights Implementation Team have helped incorporate the Civil Rights message into many Forest programs.

Public Interaction and Involvement

Goals: The goal is to use all opportunities to explain the Forest's role in implementing the Forest Service Mission.

Monitoring: Program accomplishments were assessed through interview results and a consideration of the amount of public interaction and feedback.

Results: The National Fire Plan with its various emphasis items, in particular working with communities to reduce fire hazard, has provided the Forest with many opportunities to explain its fire control and fuel reduction programs to members of the public. In concert with goals of the National Fire Plan to reduce fuels, the Rural Development Program is exploring how to best use small diameter material locally. The Forest provided leadership in a technology transfer by hosting a Biomass to Energy Conference, which was attended by interested parties from five western states.

External contacts and communications with community leaders continue to improve as shown by the increased visibility of Forest programs in one-to-one interactions with County officials and local community leaders as well as in Forest Service employee participation in community meetings. Increased public involvement in the last two years is indicated by the increase in telephone calls; the interest in fire safe councils; the interest in applying for Payment to State, Fire Plan, and other grants; and inquiries regarding small diameter utilization. The element that needs the most work is employee communications. Employees can use training in public communication skills and techniques, a better understanding of the benefits of involving the public in our projects, and an emphasis on sharing information.

Economic

Goals: The goals are to promote economic stability of local communities, develop partnerships for promoting economic stability, promote non-traditional Forest-based resources, emphasize a

diversity of goods and services, highlight scenery and recreational opportunities, and encourage the utilization of wood products.

Monitoring: Indicators for contributions by the Forest to the local economy are budget and expenditure levels; Forest collection receipts from activities; levels of non-traditional commercial products; SBA Small Business and Set-aside Salvage Sales; types and funding levels of rural development grant programs; educational and training program dollars, persons and person-days; and payments to the county through the Secure Rural Schools and Community Self-Determination Act of 2000.

Results: The timber program continues to have the largest budget as well as generating 91% of receipts to the Treasury. Emergency related expenditures related to fires and floods frequently create large local pulses of additional dollars and jobs. Economic incentive programs for timber sales include Small Business Administration and Set-Aside Salvage sales. Because there are no longer any Small Business Administration mills in Siskiyou County, these benefits go to other counties. There has only been one Set-Aside Salvage sale (on the Ukonom District) in the last three years. The commercial firewood component of timber harvest has remained fairly stable for the last thirteen years. The chip component of harvest is highly variable, depending on markets, but shows an increasing trend. Most market products and resource-related jobs associated with local customs and cultures (mining, logging, grazing) continue below that modeled for a fully funded Forest Plan as indicated by the decline in Forest receipts.

Job training, especially job retraining, is important in helping the local workforce adjust to changes in resource products, markets, and skills. Since 1996 the Forest has contributed \$1,624,971 in job training projects. This amount includes \$239,415 in 2001. Since the late 1970s, the Forest has participated in six Federally Sponsored Programs that are involved with job training, work experience, and environmental education for participants from 15 years of age to senior citizens. The Student Conservation Association, Northwest Youth Corps, and Americorps are new programs added in the last five years. In 2001 there were 218 participants that have contributed 38.26 person-years with an appraised value of \$810,590 in contributed labor. Jobs-in-the-Woods projects continue at a high level of \$2.9 million.

The Rural Community Assistance program, aimed at economic diversification, has contributed almost two million dollars since 1992, and \$169,000 in grants in 2001, to Siskiyou County through the Forest. Other projects in the County are funded through this same program on the Shasta-Trinity National Forest. In addition to the Rural Community Assistance program, which is intended to ease the transition to the Northwest Forest Plan, Economic Action Program grants have been available through the National Fire Plan the past two years. These programs emphasize the utilization of forest materials. Through these ventures over the last 10 years, organizations have continued building upon past successes, developing local expertise and businesses.

Many communities have received funding for planning, feasibility studies, and demonstration projects from Rural Development grants. Community Action Plans, Fire Safe Plans, and market studies focus community efforts and make them more competitive for receiving project funding. There have been many proposals for the development of industries related to forest and agricultural products, for small diameter manufactured products, for forest-related arts and crafts, and for regional products marketing. Many tourism-related projects have been funded to develop regional and national markets. A number of local projects are underway to capitalize upon these opportunities.

Historically Payments to States, which compensate Counties for federal lands, have fluctuated based upon timber and other forest receipts. Recent payments were based upon a formula established by Congress that resulted in a predictable, but declining, amount each year. The Secure Rural Schools and Community Self-Determination Act of 2000 has established a stable payment level to Siskiyou County of almost \$9 million per year for the next six years. This is the highest payment to any county in the State of California. Eighty-five percent of the current

payments are dedicated to schools and roads, 3.75% to benefit Forest Service lands subject to Resource Advisory Committee approval, and 11.25% for County projects.

Potential Forest Plan Amendments

The Mount Ashland Ski Area Expansion Draft Environmental Impact Statement (February 2000) is being re-considered by the Rogue River National Forest. There is no projection on when the non-significant Forest Plan amendment for the Klamath National Forest related to it and identified in the FY 1999 Monitoring and Evaluation Report will be completed.

Funding was not available in FY 2001 for the potential amendments to the Forest Plan identified in five-year monitoring review last year. They are generally wording changes to goal statements or S&Gs needed to clarify the intent, or new goal statements and S&Gs.

Forest Plan Addenda and Errata

The Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines prepared by the Forest Service and Bureau of Land Management dated January 2001 revises the Forest Plan S&Gs.

Update of Research Status and Research Needs

Biological Environment

PSW Researchers Jeffrey Dunk and William Zielinski prepared a draft report using information from the strategic surveys conducted on the four Northern California forests entitled, "Distributions of Selected Survey and Manage Mollusks Relative to Forest Service Land Allocations in Northern California," dated April 2001.

Resource Management Programs

The Pacific Southwest Experiment Station Little Horse Peak Research Study within the Goosenest Adaptive Management Area was initiated in FY 1998 to determine the extent to which different combinations of silvicultural treatments can accelerate development of late successional forest attributes in mixed stands of ponderosa pine and white fir. All logging and burning treatments have been completed. Data collection is ongoing as part of this 50-year study.

The Joint Fire Science Program of the Departments of Agriculture and Interior are funding a five-year national study called Fire and Fire Surrogate Treatments for Ecosystems Restoration. Thirteen sites were selected representing forests that are at risk of severe wildfires. One of the sites is on the Goosenest Ranger District in the Little Horse Peak Research area. Environmental analysis is being completed in FY 2002 for the Goosenest site. There are four fuel reduction treatments common to all sites: mechanical (commercial thinning plus mastication of fuels), prescribed fire, mechanical plus prescribed fire, and untreated control. There are three replications at each sites and the minimum size of each treatment is 30 acres.

Public Participation Plan

A notice of the FY 2001 Monitoring and Evaluation Report will be mailed to those on the Forest Plan mailing list. Copies will also be provided to the Klamath Provincial Advisory Committee and to anyone who requests them. The report will be posted on the Forest's Web Page. A news release will be issued to the local media.

Supporting Documentation

The supporting information for this report is on file in the various resource departments in the Supervisor's Office and at ranger district offices.

Physical Environment

County Air Quality Data from Calif. Air Resource Board internet web page.

de la Fuente, J. and P. Haessig. 1998. LMP Monitoring: Geology

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de la Fuente, J. , P. Haessig and E. Rose. 2001. 2001 LMP Monitoring: Geology (report in progress)

Haessig, P. and M. Kroetch. 2000. Beaver Air Quality Assessment Report.

Laurent, Tom. 2002. Soil cover monitoring report, Klamath National Forest.

2001. Best Management Practices Monitoring Report, FY2001, Klamath National Forest. (Available on Forest Web page.)

Jones Fire Burned Area Emergency Rehabilitation Report, Klamath National Forest.

Swillup Fire Burned Area Emergency Rehabilitation Report, Klamath National Forest.

Resources Management Programs

Susan Tebbe, 2001 Wilderness Report – Scott River Ranger District, 10/23/01.

FY 01 Road Accomplishment Report, Forest Road Manager, Klamath National Forest

Heritage Program Annual Reports from 1996 to present, Klamath National Forest.

Social Economic Environment

Title VI Accomplishment Report, Klamath National Forest.

Civil Rights Implementation Plan, Klamath National Forest.