Forest Supervisor's Letter

Thank you for having interest in and taking the time to review the results of the Willamette National Forest's 12th Annual Monitoring and Evaluation Report.

The climate in which we began implementing the Forest Plan in 1991 has changed considerably. The largest change occurred in 1994 when the Northwest Forest Plan was signed and, in turn, amended the Forest Land and Resource Management Plan by creating new land allocations.

We have since experienced a great deal of change due to continuing reductions in the Forest's operating budget.

Despite these changes, the Forest Plan is a dynamic document, designed to change with changing circumstances. I am proud to say that, with 43 amendments since implementation, the Forest has kept it promise to change as the world changes to keep our plan fresh and responsive.

This year, our "Social" monitoring section is expanded in the hope of describing some of the changes that have occurred in nearby communities. At the same time we have reduced the size of the document this year to make it simpler to read.

More information is available by contacting the Forest or by visiting our website at www.fs.fed.us/r6/willamette.

Your continued interest in the Forest Plan is just one way for you to stay current with activities on your public lands.

Sincerely,
DALLAS J. EMCH

Forest Supervisor
Willamette National Forest

Introduction and Background

The Land and Resource Management Plan (Forest Plan) for the Willamette National Forest was approved by the Regional Forester in July 1990. We began implementing the Forest Plan in September, 1990.

The Forest Plan designates areas for resource management emphasis based on the capabilities of these areas to provide differing levels of goods and services. The Plan also established Standards and Guidelines (S&Gs) that direct the management of these areas.

In April 1994 the Forest Plan was amended by what is referred to a the Northwest Forest Plan (NWFP). The amendment established management areas and additional S&Gs.

The Forest Plan also specifies monitoring and evaluation requirements to provide information necessary to determine whether promises are being kept, and to assure assumptions made during the Forest Plan analysis are still valid. Monitoring coupled with evaluation provides a control system over management activities on the Forest.

Our monitoring is accomplished with three categories of monitoring:

Implementation Monitoring is used to determine "Did we do what we said we were going to do?"

Effectiveness Monitoring is used to determine "Are the management practices producing the desired results?"

Validation Monitoring is used to determine "Are the planning assumptions valid, or are there better ways to meet Forest Plan goals and objectives?"

Evaluation is the analysis and interpretation of the information.

Evaluation provides a feedback mechanism identifying whether there is a need to change how the Forest Plan is being implemented.

The Monitoring Questions addressed throughout the year can be found at www.fs.fed.us/r6/willamette/manage/fpmr/2002/mon_questions.pdf

Physical Resources

Water quality

The Forest conducted water quality monitoring at 97 stations during 2002. Additional detailed discussion and display of the information to follow can be found www.fs.fed.us/r6/willamette/manage/fpmr/2002/waterquality/.

The Middle Fork RD monitored 53 sites in 2002. This is 12 less than 2001 due to theft, vandalism and equipment failure of the sites. The maximum of the 7-day moving average for water temperature varied from site to site and between this year and last. with some sites recording a reduction in temperature while others an increase. The maximum increase recorded was 2.56 degrees F. on Winberry Creek. The maximum decrease recorded was 2.51 degrees F. on at the mouth of Gold Creek.

Detroit RD monitored 21 sites in 2002. Seven of the sites were monitored in conjunction with the City of Salem and the U.S. Geological Survey. Multiple parameters are collected at the Cooperative sites. The other sites are primarily monitored for water temperature. Of the 21 sites only Blowout Creek at Road 10 Bridge had a 7-day moving average above the Oregon State Water temperature quality standard of 64 degrees F.

McKenzie River RD monitored water quality at 23 stations in FY02. Data has been collected but not analyzed as of this report.

Sweet Home did not conduct water quality monitoring in 2002.

No additional Sweet Home or Detroit streams were listed on the 1998 to 2002 Oregon DEQ 303(d) list as Water Quality Impaired Waterbodies.

An additional sampling location was monitored at Waldo Lake on 4 separate occasions during the summer season. Established protocols were followed which include insitu measurements and grab samples. Plans for conducting hydrological and biologic investigations were stopped when available funds were taken to conduct fire fighting activities.

An algae bloom was monitored on Hills Creek reservoir by Middle Fork RD and US Army COE personnel. These types of blooms are potentially toxic to both humans and pets. Samples were processed for quantity and type of algae present and also for cyanotoxins. A general water quality advisory was posted for water contact recreation during the months of June-September.

Air quality

The Forest is a part of a multi-Forest coordinated program to monitor air quality using lichens. From 1994-1997 lichen survey and tissue analysis data were collected from 3.4 mile grid plots installed on the Forest. Additional lichen tissue data was collected on the HJ Andrews Experimental Forest every two months between 1998 and 2000. All resources are now focused on analysis of data collected. Nearly all plots on the Forest fell within the two best air quality categories. Less than 5% of the plots had air scores in the fair range, a borderline score in which lichens may still be present but often are not. In contrast about 14% of the total land area in western Oregon and Washington was rated fair and 24% was given the worst pollution rating. A more in-depth discussion see 2002 www.fs.fed.us/r6/aq.

In addition, there were no intrusions from prescribed burning in designated or smoke-sensitive areas in the fiscal year 2002.

Fire & Fuels

A total of 594 acres burned stemming from 94 fires. The 10-year average is within the Forest Plan predictions.

Total acres of prescribed burning was up 23% from the projected plan. This was due to additional gapple piled acres burned in the fall of 2001. Overall acres planned and treated were significantly down from past years. Additional information is available in the Fire FY02 Monitoring Report.

Soils productivity & Mass movement

A positive trend continues in minimizing and controlling mass movement. Of the 20 sites monitored in 2002 13 were stable. Of those that are moving only one was not within the Threshold of Variability (TOV)[1].

Additional soil monitoring is routinely completed during the Forest Supervisor's monitoring reviews. See section "Implementation Monitoring".

Biological Resources

Fish

Forest fish monitoring has always focused on chub and bull trout habitat and populations. The Forest is also concerned about the proportion of winter steelhead and Chinook smolt numbers as a result of land management activities. Chub habitat areas on the forest are being maintained as evidence of the stable trend in the chub populations.

Bull trout habitat areas are also being maintained. McKenzie River RD is currently planning a bull trout habitat improvement project in the mainstem McKenzie River upstream of Trail Bridge Reservoir. The project proposes to add large wood to the river channel to create log complexes in an area that was salvaged after the 1964 flood.

On the Middle Fork RD planning is also occurring for a bull trout habitat improvement project. Project implementation is expected to occur upstream of Hills Creek Reservoir in 2003. In addition transportation planners have identified roads to be closed. Some of these road closures will benefit bull trout by reducing fine sediments and restoring hydrologic connectivity.

The primary method used to monitor bull trout populations is redd surveys. Based on redd survey results, it appears that bull trout populations are either somewhat reduced as seen at Anderson Creek, Roaring River, and Sweetwater Creek or slightly increasing as seen at the main stem of McKenzie River and Ollalie Creek. Fluctuations can be expected. The reduction in Anderson Creek, however, is of concern and will continued to be watched closely.

Biological Diversity

Last year's monitoring report covered the Forest's focus on meadow maintenance and restoration, as well as attention to oak and pine habitats associated with dry openings or early seral stages of several warm, dry plant associations. Succession to forested communities and invasion by aggressive non-native species were identified as the major threats to such special habitats on the Forest.

Multi-year projects were initiated in FY02 to collect information on composition, present condition, and past distribution of oak types.

Oak habitat vegetation data

In FY02, 10 permanent plots were established to record data on plant community composition and structure, soils, weeds, and dead/down wood. Many plots showed evidence that forest (often Douglas fir/poison oak plant association) has taken over former oak habitat. In such sites, most of the dead down wood is oak, but this is little recruitment of oak seedlings and saplings. On other types of sites good oak recruitment was observed. Common weeds encountered in oak habitat plots include Scot's broom, St. John's-wort, oxeye daisy, and wild carrot. The information from these plots will also be used in an ongoing-bioregional Oregon white oak habitat classification project.

Oak/pine historic distribution

The Oregon Natural Heritage Program reconstructed eight township maps from early General Land Office survey notes, and provided them in digital format to show historic occurrence of oak woodlands and savannah along the Middle Fork of the Willamette River in the Middle Fork RD. Further GLO maps of oak/pine habitat are being assembled to complement extensive reconstruction of historic habitats of NW Oregon. Partners include Eugene BLM, Salem BLM, Mt. Hood NF, and Columbia River Gorge National Scenic Area.

Forest restoration priorities

The FY02 interdisciplinary matrix developed for evaluating and prioritizing special habitat restoration needs was refined to emphasize the Forest's restoration project(s) for funding in FY03.

Huckleberry field restoration

Sweet Home RD cooperated with Tribal members in designing a restoration project to revitalize the Cougar Rock Special Interest Area huckleberry fields. This is another example of special habitats which represent early seral conditions of forested plant associations (for huckleberries, often silver fir/big huckleberry types). Active management is necessary to achieve highly productive huckleberry fields as forest canopies close and shade the huckleberry bushes.

Biological Resources

Wildlife

The Forest provides diverse habitat which supports over 260 wildlife species. A select number of species, requiring a diverse degree of habitat needs, were chosen to be managed for their required habitat which in turn assured other species' needs are met. These selected species were termed Management Indicator Species (MIS).

Two of the species are the Bald Eagle and Peregrine falcon. Habitat for these species has been maintained and their populations are stable or increasing.

Primary cavity excavators (PCEs) which rely on dead and decaying trees, another MIS species, have been the subject of a long-term study to understand if the snags being provided persist on the landscape as planned and if those snags are used and contribute to a viable population. Results show habitat for PCEs is being adequately maintained. Interim results are now available.

PILEATED WOODPECKER, *Dryocopus pileatus*

Deer and Elk management continues to receive additional attention to improve modeling efforts that estimate changes in habitat as a result of management activities. Based on hunter statistics and annual census counts by ODFW, population trends for both deer and elk are down forestwide, especially the deer. Potential contributing factors are lack of adequate forage. The lack of security cover caused by high road densities may also be a contributing factor. Determining actual populations trends and their contributing factors will need further study.

Plants

Botanical surveys were conducted on habitat disturbing projects for targeted sensitive and survey and manage botanical species. 49 acres. Biological Evaluations and 99 Survey and Manage prefield reviews were completed. Major findings included new populations of *Lewisia columbiana var. columbiana* and *Cimicifuga elata* and *Nephroma occultum* on Middle Fork District, 58 new S&M sites on Sweet Home, and a new population of *Aster gormanii* on McKenzie River extending the range of the species

A total of 14 botanical days were dedicated to monitoring 9 sensitive plant species: *Frasera umpquaensis* (2), *Cimicifuga elata* (2), *Lycopodiella inundata* (1), *Utricularia minor* (1), *Romanzoffia thompsonii* (1), *Ophioglossum pusillum* (3), *Botrychium minganense* (1), *Botrychium montanum* (1) *and Aster gormanii* (2). This monitoring is directed by Conservation Strategies to ensure selected population's health and vigor remain stable. With the exception of the *Ophioglossum* population at Owl Creek which seems to have fallen victim to natural succession (1 plant was located last year and none the previous 2 years), populations remain within the range of variation established by preliminary monitoring.

The Botany program initiated several cooperative agreements the:

1. Cascade Mycological Society. with the purpose of recording the fungal species presence in the Hackleman Creek area;
2. Confederated Tribes of the Grande Ronde and the Confederated Tribes of the Siletz to monitor the effectiveness of past management techniques in enhancing camas (*Camassia quamash*) at Camas Prairie and to assist in site preparation and prescribed burning of the prairie in 2002; and finally
3. Oregon State University Department of Botany and Plant Pathology to analyze the genetic diversity within and between populations of *Calamagrostis breweri* on Mt. Jefferson and Mt. Hood. Previous work with this species indicated that there is very little diversity between populations. The results of this study will be important in prioritizing management of specific populations.

Three hundred twenty seven noxious weed sites were scheduled for treatment in 2002. Approximately 80% of the sites were treated using manual (789 acres), chemical (326 acres), mechanical (44 acres), competitive planting (20 acres) and black plastic (1 acre).

Twenty-one acres were seeded with native species this year in a variety of projects including the Buckhead fire.

The botanists on the Forest were a part of numerous special projects in 2002. For more information on these projects and details about the other 2002 accomplishments see www.fs.fed.us/r6/willamette/manage/fpmr/2002/botany02rpt.pdf.

Cultural Resources

The Forest cultural resource inventory reflects a resource base of over 2,200 historic properties. During FY2002, the Heritage staff documented monitoring 109 sites. New impacts were noted at 9 of the sites monitored; of which 6 were considered significant. At 12 sites cumulative impacts of on-going adverse conditions were reported. Site specific impacts were relatively minor yet damage assessments under Archaeological Resource Protection Act and/or Law Enforcement investigations are underway at two sites. Field archaeologists reported that mitigation prescriptions were successful at 7 sites visited, while most sites had no prior mitigation requirements. Additional protection or some form of new mitigation, including more monitoring, was recommended for 19 sites.

Several historic structures were repaired in FY 2002, including Fish Lake Remount Station, Gold Butte Lookout, Longbow Organization Camp sleep shelter and amphitheatre.

The Forest has responsibility for just over 100 historic buildings. Lack of maintenance funds continues to present a problem for many historic structures. Better management of historic structures, however, is being achieved through a new reporting system (INFRA) that documents specific needs for individual buildings and the Forests' focused attention on historic buildings. Many historic properties have been identified as excess to the forest's needs. Evaluations of eligibility for the National Register of Historic Places are being conducted. Some structures are being rehabilitated to prepare them for sale or re-use, or thorough documentation is being completed as mitigation for potential loss of the buildings.

A more detailed discussion on cultural resource monitoring can be found in the www.fs.fed.us/r6/willamette/manage/fpmr/2002/cultural02rpt.pdf.

Specially Designated Areas

Specially designated areas on the Forest is a broad term that includes Wild&Scenic Rivers, Research Natural Areas, Old Growth Groves, Special Interest Areas, and Roadless Areas.

RNAs: Two RNAs were visited in 2002 and RNA stewards were also polled on the districts. No management related disturbances were observed nor expected to be present in 2002.

McKenzie Pass was visited to augment 10-year remeasurement results completed in 2001 to record stand structure, species composition and tree growth. Gold Lake Bog was also visited No noticeable human impacts were noted from incursions on the west side of the Gold Lake nor did we find signs of recent large changes to the fen ecosystem.

Wild & Scenic Rivers: Within budget and staffing constraints, formal and informal monitoring of conditions is occurring on Wild and Scenic Rivers. Wild & Scenic Rivers (W&SR) are being protected in accordance with the Wild & Scenic River Act.

The Forest's newest W&SR, Elkhorn, will have a management plan prepared in 2003/2004.

Roadless Areas: No activity is planned in roadless areas.

Other unique areas: In June 2002 the Opal Creek Advisory Council, in consultation with the Forest Service, completed and signed a management plan for Opal Creek in 2002. The decision was appealed with resolution expected in 2003.

Recreation

All Districts reported that the S&Gs appropriate to each assigned Recreation Opportunity Spectrum (ROS) class were followed in the planning of all proposals to remove resource products, and all actions taken to accommodate or control human use. Problems center around improper use of recreation sites. Examples include party size exceeding site capacity and user activities inconsistent with designated ROS settings.

On the McKenzie RD, the Santiam Pass Dispersed Summer Recreation Planning Project will produce a Plan that will balance the recreation opportunities with the protection of natural and cultural resources. Currently, largely unmanaged dispersed day and overnight uses in the Santiam Pass area continue to increase each summer season. Increased use levels, value conflicts and client behaviors are degrading the ROS values of the area.

Other areas that are being monitored closely include Cougar Recreation Area, Waldo Lake area, dispersed use around Hills Creek Reservoir and the Fall Creek area. For more information on these areas

see the Recreation FY02 Monitoring Report.

With respect to recreation use, the forest participated in "The National Visitor Use Monitoring Project" in 2002. The Project answers a national need for accurate consistent recreation use information. The Project will provide a consistent method and a base of data for determining recreation use types and levels. Data related to recreation use in 2002 is expected in Spring 2003.

Trails: Trail management is consistent with S&Gs, although budgets allow for only minimum levels of maintenance. Trails funding is being augmented with the Recreation Fee Demonstration Program and Payments to Counties (PAYCO) to ensure that S&Gs are being met on all Forest trails. In 2002, PAYCO funds allowed heavy maintenance or reconstruction on several trails on the Middle Fork RD. No new trails were constructed.

Developed Recreation

Larger campgrounds operated by concessionaires are being managed and maintained to standards higher than would be possible if operated by the Forest. Other developed sites are managed under the Recreation Fee Demonstration Program, which allows the Forest to retain site revenues to supplement allocated funding and thereby manage/maintain the sites to standards expected by and acceptable to visitors. PAYCO funding was received in 2002 to replace all the pit toilets in Marion Forks Campground. That work will be accomplished in 2003.

Problems at campgrounds include demand exceeding sites available, party sizes exceeding site capacity, users desiring a higher level of amenities than typical of Forest Service campgrounds, and finally vandalism. These problems are long-term, but transitory. They appear to be part of a consistent, long-term trend, due to the Forest not having sufficient funding for major renovations of developed sites and greater personnel presence.

Off Road Vehicle Use: The Forest began, in 2001, a comprehensive effort to identify and clearly designate more forest system roads and trails that are suitable for OHV use. That effort should be in place by 2004. Planning for an OHV riding area at Santiam Pass was begun in 2002 and is expected to be completed in 2003.

Snowmobile incursion into the Three Sisters Wilderness continues despite enhanced wilderness boundary signing and patrolling. Some user groups are assisting to improve the situation but incidents of trespass are becoming more widespread and blatant.

The Forest monitors for the safety and any user conflicts that can occur with this type of recreation. Safety, as reflected in accident reports, does not seem to a problem. Conflicts and complaints between user groups (i.e. snowmobiles vs 4-wheel drive vehicles and snowmobiles vs nordic skiers) continue, in areas. Resource damage will also occur with this activity if not properly managed. There are concerns about the resource impacts from unauthorized OHV use in undesignated areas and disturbance to listed species such as the bald eagle. For more detailed information on Recreation issues see the Recreation FY02 Monitoring Report.

Scenic Resources

With three districts reports all landscape altering activities were thinnings and met or exceeded the visual quality standards.

Timber: Volume is measured in several ways including green, salvage, and miscellaneous convertible products. In addition, the Willamette is responsible for providing alternative volume in response to the Rescission Act. In FY 2002 the Willamette offered 61 million board feet (MMBF) in green, salvage, and miscellaneous convertible products. The forest also awarded 10 MMBF in alternative volume. The low accomplishment was due in part to moving much of the timber program to commercial thinning of smaller, younger trees instead of regeneration harvesting of larger, older trees. The cost and time of preparing and offering commercial thinning sales is higher so for the same amount of funding and time we are able to offer a smaller amount of timber.

Silvicultural Practices

Growth responses from timber stand improvements (TSI) appear to consistent with expectations in the Forest Plan.. Genetically improved stock is being used as planned and will maintain or exceed the growth of natural seedlings.

Of the 1,167 acres of regeneration harvest in FY97, 719 acres (62%) were certified stocked by FY02. The remaining 448 acres (38%) are in the examination stage following reforestation planting or natural regeneration. No backlog of unforested areas is occurring or expected to occur.

TSI accomplishments of thinning, release, and fertilization totaled 6,624 acres. Accomplishments are

well below predicted plan. Stands that are currently available for TSI treatments were not being treated because appropriated funding was only 8% of the requested funds. A significant backlog of plantations in need of thinning is building on the Forest.

Insect & Disease: Aerial surveys conducted for insect and disease in 2003 showed mortality on affected areas increased from 9,146 acres last year to 15,400 acres in 2002. Black bear, Douglas-fir bark beetles, and Mountain pine beetle continue to be the primary agents of tree mortality.

Across the Forest older trees with red needles indicate mortality caused by Douglas-fir bark beetle. Pockets of dead trees can be seen especially near Carman Smith ridge, O'Leary Mountain, French Pete Creek, within the Three Sisters wilderness near Horse Creek, Skookum Creek./Box Canyon, Gobel Creek./Warner Mountain., Swift Creek. and Staley Creek.

Tree damage and mortality from black bear has significantly increased. Major concentrations have occurred in the Little North Santiam drainage, Thomas Creek., north of Quartz Creek., upper Rainbow Creek., west of Cougar reservoir, Sardine Butte, and many plantations in the Fall Creek./Carpet Hill area. On-the-ground surveys show some mortality surveyed as bear damage is actually caused by root disease and mountain beaver girdling.

Mountain pine beetle killed approximately 3,980 acres of lodgepole pine trees in the Mt. Jefferson wilderness area.

Transportation

Policy changes in the last several years have had a profound effect on how roads will be managed in the future. In the past the primary purpose for road construction on the Willamette was to enable timber harvest. Most of these roads exist in areas where timber harvest is no longer an objective. The forest now receives approximately one-third of the funding necessary to maintain the current road system. This has resulted in a backlog of unfunded road maintenance. The situation is duplicated across the Nation prompting the Forest Service to initiate the new Roads Management Policy that shifts our focus away from developing new roads to managing the existing road system.

STATUS OF THE FOREST'S TRANSPORTATION SYSTEM

Road Construction and Reconstruction	
Miles of road constructed	0.6
Miles of road reconstructed	44.6

Road Suitability	
Roads Suitable for Passenger Cars	1,562
Roads Suitable for High Clearance Vehicles	4,232
Closed Roads	759
Total Miles	6,553

Miles of road removed	
Miles of road decommissioned	0.0
Miles of temporary road closed	No longer reported

Traffic volumes

It generally appears that traffic volumes are increasing over time on the Forest's arterial routes. Traffic generated by recreation use, which has increased 10 fold since 1950, is the likely cause for the upward trend making these routes a high priority for annual maintenance and repair.

The values of many of the Forest's outputs are determined by trends in public preferences. This section of the monitoring report describes the social and economic environment that affects management of the Forest.

The Forest monitors how the social and economic conditions are changing over time.

Social

In 2002, James Kent Associates completed human-geographic mapping of most of the Willamette geographic province. This research, summarized below, reflects the first substantive gathering of qualitative sociologic data covering communities within and around the Forest. The body of data will serve as a benchmark against which future assessments can be measured.

The wealth of information contained in this report is more than can be properly summarized here. The following can only give the reader a flavor of the major findings related to the socio-economic and socio-political environment of public lands management. For a more in-depth understanding of the results refer to www.naturalborders.com/willamette/index.htm.

Social and Economic Environment

Increased economic diversification: The newly released census data and economic studies of local areas, plus the observations of residents support the assertion that the Willamette regional economy is much more diverse than 10 years ago.

A commuting economy: The most widespread theme citizens reported is, "We have become a commuting economy." The frequency of this statement and the detailed descriptions provided by residents emphasized the profound meaning this change has created. The positive aspect is that workers have been able to adjust to a post-timber economy. The urban labor market has expanded and draws from a much larger area. In many cases, we were told this change has been positive for quality of life and for standard of living. Once past the political rhetoric about whether or not reduced timber production has been appropriate, people indicated that their income often went up and that their life options had expanded.

The post-timber commuting economy has had a number of negative consequences as well. Commuting takes a toll on leisure time and family life. Finding positive outlets for children and youth has become a major challenge in small towns and big towns alike.

Significantly, the smaller communities reported a loss of leadership because of the commuting economy. Professional people especially are now commuting to the cities and are less involved in community life and leadership functions.

Finally, the commuting economy has had an enormous negative impact on the economies of small rural communities. Rather than a "family wage job" at a mill, workers have 2 to 3 lesser paying jobs in recreation and support services. Rather than the seasonality of the timber sector, they deal with the more severe seasonality of the tourism sector. The loss of a timber base has reduced the number and output of local commercial and retail enterprises, and the loss has been accentuated by the rise of large commercial stores in the more urban communities. As a result, the small rural towns have experienced tremendous "economic leakage" whereby local residents spend increasingly larger portions of their salary outside their communities by shopping for the family as part of the work routines.

A growing and aging population: A doubling of the area's population is projected in the next 50 years. For the first time, there are more Oregonians over the age of 70 than there are teenagers. The senior population will double by 2030 in the state of Oregon. New residents are urban in outlook, very interested in public lands, active in using public lands, but lacking the knowledge base of earlier generations about Oregon ecology.

A population geographically re-distributing itself The population figures from the 1990 and 2000 censuses indicated a common pattern. The urban centers grew from 14-18% generally during the last decade, while the very rural areas lost population or held steady. This phenomenon reflects the rise of the commuting economy and the search for affordable housing within driving distance of the urban labor market. It also reflects what the literature calls "amenity migration." Around the west, people are settling in areas that have high quality of life characteristics. Rather than creating jobs that attract people, people are bringing jobs with them to attractive areas

The Social and Political Environment

Orientation to public lands: The research revealed numerous patterns in public land use.

1. The Willamette River remains an important boundary in most of the area. West of the river, people relate more to the coast, while east of the

river people orient to the Cascades and central Oregon.

2. The primary users of public lands are individuals who are not oriented to organized recreational activities.

3. The urban centers showed differences in the degree to which citizens are oriented to public lands. Salem, for example, is on the low end of involvement with public lands. Although many boats and RVs were observed in neighborhood settings, the number of stores devoted to recreational uses of public lands seemed far fewer than the other urban centers. Moreover, the language of residents revealed a perception that public lands were too far away to be very accessible. While Eugene residents boasted that any number of recreation amenities were "only an hour away," Salem residents said the nearest public land was 45 minutes away and "too far to be worth it." By contrast, Albany residents described an active pattern of public land use and long-standing routines related to public lands.

4. The urban areas exhibited strong values for outdoor aesthetics and environmental stewardship, but expressed them closer to home through parks and trails programs, outdoor education, and social programs. The urban governments are very active, even with current budget difficulties, in providing these programs, as well as responding to habitat and species needs in direct ways. Corvallis and Eugene, for example, are responding to requirements of the Endangered Species Act. Springfield and Eugene are cooperating to purchase tracts of land for regional parks.

5. Urban leaders describe ties between their interests and the federal land management agencies as weak. Leaders expressed an active interest in collaboration about mutual environmental concerns such as water quality and species habitat, as well as sharing research and monitoring functions.

6. Urban uses are growing, and will become more organized over time, oriented to older populations and more specialized. Research revealed a large number of schools, civic and social groups organizing outings on public lands. Retired people will make up a greater proportion of public land users as they come to make up a greater proportion of the total population.

Traditional Oregonians, those with long-standing ties to the state and to the economic activities of timber, agriculture and mining, generally expressed regret for the loss of favorite places because of increased density. An attraction to "secondary" areas is now evident because they are not as crowded. For example, the Sweet Home corridor has become special to traditional people. While Sweet Home leadership desires upgrading for Highway 20 it is clear that many people appreciate the area because it is not upgraded and consequently is less crowded

The Forest Service Mission: The Forest Service still has a bank of residual good will from its history of service to local communities.

The Forest Service is currently given good marks by a great number of people who commend it for recreation amenities, guidance and information on enjoying the forest, trail maintenance, community responsiveness, and community development functions

Many question the current mission of the Forest Service if it is not a grower of trees. If it is protection, let it become the National Park Service and acknowledge the change, say the critics. If it's grant making, let other agencies better equipped do that.

Some individuals at either end of the political spectrum, timber and environmental, expressed anger, bitterness, and skepticism about federal land management of the last decade and the prospects for the future.

The emotionality notwithstanding, many people believe that timber harvest is permissible in the current climate, and is desirable from a forest health and community health standpoint. They are waiting for the Forest Service to assert, to what they see as a vocal environmental minority, that an environmentally responsible timber sale program is possible.

Other community members are grateful for the leadership and support role the Forest Service has played. Participation in community development efforts, guidance in locating grant opportunities, and direct grant support have been very much appreciated. The support refers to the Rural Community Assistance program, whose funding is currently in jeopardy in the next budget cycle, as well as support to the Watershed Councils and other programs of the agency. Communities have seen this aspect of Forest Service management as the major, positive alternative to a timber program.

Budget

Fiscal Year 2002 final expenditures displays:

- Funds appropriated by Congress for the management of National Forest lands, and
- Permanent and Trust Fund monies

Funds appropriated by Congress are for specified purposes such as wildlife management, timber, or general administration. The Forest does not have the authority to spend money appropriated for one type of activity on some different activity. As a result, even if there is a surplus in one type of fund, that surplus cannot be used to make up a shortfall in another type of fund.

Permanent and trust funds are fees collected for specified forest projects such as timber sales, salvage sales, and road use. The funds are used for activities associated with these projects such as slash disposal, preparation and administration of salvage sales, reforestation, and road maintenance.

FISCAL YEAR 2002 FINAL EXPENDITURES

Description	FY02[1]
Facilities Capital Improvs & Mtce	6,030,615
Forest Products	6,713,435
Grazing Management	1,103
Inventory and Monitoring Activities	1,029,439
Knutson/Vandenburg Funds	4,036,394
Land Management Planning Activities	180,981
Land Ownership Management	1,223,028
Law Enforcement	93,915
Minerals and Geology Mgt	248,421
Payment to Counties	1,642,057
Recreation/Heritage/Wilderness Activities	2,189,337
Roads Capital Improvs & Mtce Activities	2,428,484
Senior Program	110,463
State and Private Forestry	247,184
Trails Capital Improvs & Mtce	556,841
Vegetation and Watershed Mgt	1,069,873
Wildland Fire Management / Fuels Treatment	11,331,245
Wildlife and Fisheries Habitat Mgt	970,539
TOTAL	40,103,355

[1] Knutson/Vandenburg Funds are funds used for post harvesting improvement activities. Primary beneficiaries of these funds are Reforestation, Recreation, Watershed , Wildlife, and Fisheries Management
Payments to Counties are funds returned to the forests for use on road maintenance and watershed restoration projects.

Forest Receipts	
Fiscal Year 2002 Receipts…..…	$4,526,570
Forest Plan Est. Receipts.....….	$170,532,831
Forest Plan estimated receipts and payments are inflated to represent 2002 dollars.	

Receipts to Counties	
Fiscal Year 2002	$38,295,432
Forest Plan Est. Payments	$42,632,374
County Breakdown	
Clackamas	$11,388
Douglas	$1,188,212
Jefferson	$3,049
Lane	$23,657,875
Linn	$10,755,901
Marion	$2,679,007

Implementation Monitoring

The Forest completes Implementation Monitoring at two scales. Each asks the same basic question. "Is the Forest implementing the Forest's standards and guidelines as stated in the Forest Plan and in the Northwest Forest Plan?" Forest Plan implementation monitoring is conducted by the Forest Supervisor whereas the Regional Ecosystem Office (REO) conducts the Northwest Forest Plan monitoring trips. Each trip consists of a review the environmental documents and then a review of the project on-the-ground.

Forest Plan Implementation Monitoring

In the course of conducting Forest Plan monitoring the forest reviewed four projects, Clark Creek Culvert Replacement, Fall Creek/Delp Creek Fish Habitat Improvement Project, Jefferson Bridge Replacement Project, and a variety of Hoodoo Ski Area projects.

Jefferson Bridge: Overall conclusion of the review team is that the Jefferson Bridge replacement project met the S&G's in the Forest Plan as revised by the NWFP and the project was implemented consistently with the mitigation measures outlined in the EA and the Decision Notice.

Hoodoo Ski Area: This project completed and documented all Survey and Manage surveys prior to ground disturbance. Visual objectives for the area were met, and access requirements for all users of the facility were considered by the ski resort.. The results of the implementation are good and reflect conscientious efforts of persons responsible for implementing the project. A lot of potential conflict with the S&Gs was avoided or minimized by the time allowed for "front-end" review of the proposed actions. The team noted the importance of documenting all the actions. We need to be alert for emerging issues, evaluate how it may effect particular special use permits (ski areas) and take any proactive steps to minimize future crises. ESA issues on the horizon such as the status of the wolverine are examples of these emerging issues.

Clark Creek: This project was well-done. The bottom of the existing culvert was badly rusted with holes and was adjacent to a high use recreation site and where people often walked through the culvert. All S&Gs monitored had been met. Additional follow-up monitoring was recommended to assess the effectiveness of the project to open more habitat to fish.

Fall Creek/Delp Creek: During this project log and boulder structures were put in Fall Creek above the falls and in Delp Creek in 1994. During the flood events of 1996 and 1997, some of the structures were dislodged and were reconstructed or repaired. Based on a visual assessment of the stream channel conditions (pools, sediment recruitment, down wood recruitment) the project structures are improving the stream conditions.

NWFP Monitoring

The Seven Jump Timber Sale was randomly selected from a list of LSR thinning projects by REO. The purpose of the project was to accelerate the development of late successional forest conditions in 70 to 80 year old stands. The review team determined that all the applicable NWFP S&Gs, were met for the project. The variable density thinning including small gaps and leave patches was implemented according to prescription. No significant issues related to interpretation of S&Gs surfaced during the review. The most significant discussion focused on how the prescribed levels for down the Sevenmile LSR thinnings were proposed and approved. It was generally agreed that based on the current LSR assessment and current research regarding potential/natural levels of down wood in late successional habitat, higher levels of post-thinning down wood would be prescribed for new thinnings.

ROAD SYSTEM CHANGES WITHIN KEY WATERSHEDS SINCE 1995

Key Watershed	Miles of road built	Miles of road decommissioned	Current net change
Little North Santiam	0.00	0.30	-0.30
Upper North Santiam	0.41	4.80	-4.39
Upper McKenzie	1.12	11.21	-10.09
South Fork McKenzie	0.00	20.22	-20.22
NF MF Willamette	1.70	12.00	-10.30
Horse Creek	0.00	0.00	0.00
"Chub" Watersheds	0.00	0.00	0.00

Accomplishments

The following table compares the actual accomplishment of selected Forest Plan objectives during the fiscal year 2001 (FY01), October 2000 through September 2001) with the predictions in the Forest Plan (Chapter IV, pages IV-10 to IV-12). Also shown are the cumulative outputs and accomplishments since the Plan was implemented. The cumulative results are expressed as average annual. This provides the closest comparison to the Forest Plan averages, which are based on a 10-year planning period.

Outputs may vary annually for many reasons including year-to-year scheduling decisions, market conditions, budget appropriations, and even weather conditions. Thus, comparison of a single year may not provide enough information for an adequate evaluation.

The Northwest Forest Plan was the basis for significant modifications to land allocations and to Standards and Guidelines. With these changes coupled with declining budgets, notable differences between Forest Plan projections and subsequent accomplishments are evident. The following table (Summary of Program Accomplishments) reflects adjustments to the Forest Plan projections for timber related activities; however, no other projections were altered.

SUMMARY OF PROGRAM ACCOMPLISHMENTS

Output or Activity	Units	Projected Forest Plan Level	FY 2002 Accomplishment		Cumulative Avg. Accomplishment	
		Units	Units	%	Units	%
RECREATION AND WILDERNESS						
Developed Recreation Use	MRVDs	2,056.0	*Data unavailable. The database reporting recreation visitor days is currently in transition to a new system. New recreation data should be available in 2004.*			
Nonwilderness Dispersed Recreation	MRVDs	1,770.0				
Wilderness Recreation Use	MRVDs	342.0				
Trail Construction/Reconstruction	Miles	78.0	2.0	3%	26.5	34%
Developed Recreation Construction	PAOT	327.0	--	--	69.7	21%
Developed Recreation Reconstruction	PAOT	844.0	--	--	332.7	39%
TIMBER MANAGEMENT						
Timber Sale Program	MMBF	136.0	71.0	52%	63.6	47%
Timber Harvest Treatments						
Regeneration Harvest	Acres	3,144.0	109.0	3%	865.0	28%
Commercial Thins	Acres	2,808.0	692.0	25%	1,421.3	51%
Timber Stand Improvement	Acres	18,100.0	6,624.0	37%	10,331.5	57%
Reforestation	Acres	3,144.0	2,003.0	64%	2,830.9	90%
Fuel (Slash) Treatment	Acres	3,144.0	641.0	20%	1,772.9	56%
ROAD MANAGEMENT						
Road Construction	Miles	40.0	.6	2%	3.5	9%
Road Reconstruction	Miles	174.0	44.6	26%	101.3	58%
Roads Closed	Miles	890.0	759.0	85%	648.8	73%
Roads Suitable for Passenger Car	Miles	1,580.0	1,562.0	99%	1,589.0	101%
Roads Suitable for High Clearance Vehicles	Miles	4,530.0	4,232.0	93%	4,100.4	91%
FISH / WATER / WILDLIFE / LIVESTOCK						
Watershed Improvement	Acres	533.0	49.0	9%	225.4	42%
Anadromous Fish Habitat Improvements	Miles	6.0	10.0	167%	8.4	--
Resident Fish Habitat Improvements	Miles	5.8	4.0	69%	3.8	66%
Wildlife Habitat Improvements	Structures	451.0	335.0	74%	389.1	86%
Livestock Grazing (AUMs)	AUMs	200.0	0	0%	70	35%

Status of FY02 Recommended Actions

In the previous year Monitoring and Evaluation Report, two specific follow up actions were recommended based on Forest Plan monitoring results. Included in the Forest's yearly monitoring is the evaluation of the status of the follow up actions recommended the previous year. The following narrative summary briefly describes the actions taken or the status of the follow up actions recommended in 2001.

The Forest recommends the creation of a matrix to determine treatment techniques in meadow restoration.

FY01 monitoring of special habitats focused on meadow restoration. A matrix for "treatment options" would assist with prescription and rationale for treatment appropriate for a given special habitat.

Status: In response to FY2001 recommendation, the Forest has been working with University of Washington professor Dr. C. Halpern to apply appropriate treatments in the Bunchgrass Meadow project in McKenzie River District, but the project has not yet been implemented. It will take some time with different sites and treatments before a matrix of treatments will be available.

The Forest recommends adjusting planned activity levels for road construction and reconstruction to be consistent with the NWFP, Roadless Area EIS, and Access & Travel Plans

Construction and reconstruction predictions in the Forest Plan were estimates needed to meet the demand for recreation and timber harvest. The harvest levels since the Forest Plan Implementation has been adjusted from 491 MMBF to 109MMBF. With the reduction of timber volume harvested a revision road construction estimates was considered.

Status: Predicted road construction and reconstruction in the Forest Plan were maximum miles of road and never intended to be requirements. Determining the number of miles of future road construction, reconstruction, and closing of roads is best completed during Forest Plan revision and on an interim basis at the district level in access and travel management plans.

Evaluation and Recommended Actions

Each year the the Forest Interdisciplinary Team meets to review the Forest Plan monitoring results of the previous year. The group determines which areas need increased emphais and follow up actions based on the monitoring results. The following areas are recommended for follow up actions.

Monitoring Plan Review

The Forest Plan has been updated since implementation in 1990. With the adoption of the Northwest Forest Plan and significant changes the Forest recommends an evaluation of monitoring questions to look for opportunities to improve the overall Monitoring Plan while still maintaining the objectives inherent in the Monitoring Plan.

Recreation

In FY01 the Waldo Lake Basin Plan was rescinded. This has been a long standing and well documented area with ROS activities inconsistent with its intended use. The Forest recommends a new effort to establish a new plan for Waldo Lake.

The forest increased its recreation monitoring by surveying recreation use across the Forest and will continue every 5 years. The Forest recommends an evaluation of the data to determine the consistency of the new data with land allocations and ROS settings established in the Forest Plan.

Weed Treatment

The 1999 Environmental Assessment for Integrated Weed Management states the Forest will evaluate a full range of treatments and use herbicide treatments as a economically viable to do so. The Forest recommends an evaluation on our success in preventing or controlling invasive species under this plan.

Fish Populations

Monitoring of fish populations on the Forest specifically the Oregon Chub and bull trout have raised concerns. With no known limiting factor, the recent decline in the Oakridge Slough population of Oregon Chub has raised concern. The Forest recommends a study to isolate the limiting factor for this population.

The bull trout populations specifically in Anderson Creek have also raised concern. The Forest recommends close monitoring of

this population to determine if this is only a fluctuation or the beginning of a downward trend.

Forest Plan amendments

Your Forest Plan is a dynamic document that can be amended in response to:

- Errors and/or discrepancies found during implementation.
- New information.
- Changes in physical conditions.
- New laws, regulations, or policy that affect National Forest management.
-

We frequently learn about the need for amendments through monitoring.

Since first published in the summer of 1990, there have been 43 nonsignificant amendments to the Willamette National Forest Plan. In addition, during 1994 the Northwest Forest Plan was completed and amended all Forest Plans in the range of the Northern Spotted Owl including this Forest. Because all Forest Plans were amended at the Regional level, the amendment did not receive a number.

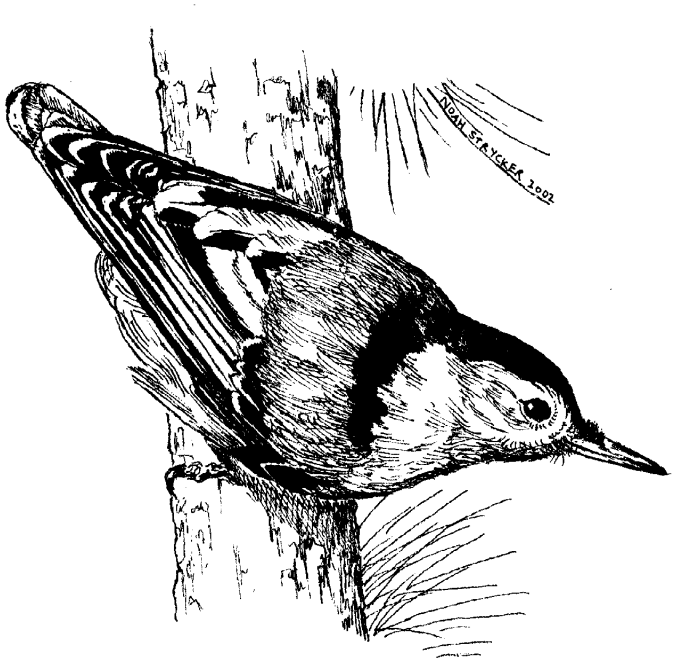
The following summarizes the amendments to the Forest Plan:

Amendment	Implementation Date	Type of Change
1	10/30/1990	Vacates Regional Guide for spotted owls.
2	12/10/1990	Allows snowmobile use in certain parts of Santiam Pass area.
3	08/05/1991	Corrects errors and omissions in Forest Plan (errata).
4	08/05/1991	Requires roadside brush management methods be consistent with scenic resource needs and allows machine mowing.
5	08/05/1991	Corrects mapping error in boundary of Diamond Peak Wilderness.
6	08/05/1991	Changes and clarifies direction about retention of downed wood to better meet functional and operational objectives.
7	03/22/1992	Established Management Plan for the McKenzie Wild and Scenic River;
8	03/22/1992	Establishes Management Plan for the North Fork of the Middle Fork of the Willamette River Wild and Scenic River.
9	02/20/1992	Changes official Forest Plan Map from manually drafted management areas to a digital version on Forest's Geographic Information System.
10	03/14/1992	Changes about 67 acres in Spring Butte area (Rigdon) from General Forest (MA-14a) to Special Habitat Area (MA-9d).
11	03/14/1992	Changes about 65 acres in Beaver Marsh area (Rigdon) from Special Interest Area (MA-5a) to Special Habitat Area (MA-9d).
12	04/04/1992	Adds Habitat Conservation Areas (HCAs) for northern spotted owl and adopts the standards and guidelines recommended by the interagency Scientific Committee.
13	07/29/1992	Makes initial allocation of about 640 acres of land acquired by land exchange not far from the South Pyramid area on the Sweet Home Ranger District to General Forest (MA-14a).
14	07/29/1992	Changes about 51 acres in the Long Ranch area, Sweet Home Ranger District, from Dispersed Recreation - lakeside Setting (MA-10f) to Special Habitat Area (MA-9d).
15	07/06/1992	Adds standard and guideline MA-1-20a to clarify that the visual quality objective for wilderness is Preservation, and deletes FW-059.
16	07/29/1992	Establishes new Management Area, Integrated Research Site (MA-3b) to support research on long-term site productivity and moves a pileated woodpecker site within the area. Also, relabels the H.J. Andrews Experimental Forest as MA-3a.

Forest Plan amendments

Amendment	Implementation Date	Type of Change
17	02/17/1993	Extends deferment of timber harvest and road construction in the Opal Creek area for up to an additional two years.
18	02/17/1993	Clarifies direction in Forest-wide standard and guideline FW-018 to provide more site-specific and objectives.
19	06/02/1993	Relocates about 1,100 feet of Bornite Brook and 900 feet of Vanishing Creek, and by so doing interchanges the actual location of affected lands between MA-14a and MA-15. Upon reclamation of the bornite project's tailings impoundment, creates about 5 acres of wetlands converting that acreage from MA-14a to MA-15.
20	05/17/1993	Adds S&G to require an integrated management approach for weed management for the most effective control methods, based on site-specific conditions.
21	06/23/1993	Makes initial allocation of 123 acres acquired through land exchange on the Blue River RD, 59 acres allocated to MA-5A (Gold Hill SIA); 64 acres allocated to MA-11d near Blue River Reservoir.
22	11/24/1993	Allows temporary reduction in availability of elk cover in Mill Creek and Anderson Creek High Emphasis areas (McKenzie RD) to allow stand management practices which will accelerate the development of high quality cover.
23	01/05/1994	Establishes the Forest's Special Forest Products Management Plan, including implementing direction through several new Forest-wide S&Gs.
	05/20/1994	Establishes land allocations and S&Gs as described in the Record of Decision for Amendments to the Forest Service and Bureau of Land Management management plans.
24	09/29/1994	Changes 1/2-acre in the Westfir area from Scenic-Partial Retention (MA-11c) to Special Use-Permits (MA-13a).
25	05/26/1995	Modifies the S&Gs for riparian reserves, wildlife tree provisions, and fueling loadings in MA-3b and AMA Long-Term Ecosystem Productivity project. This was a nonsignificant amendment to the Forest Plan.
26	05/17/1995	Modifies the S&Gs for visual objectives, big-game management, and the retention of large woody material. This was a nonsignificant amendment to the Forest Plan.
27	06/22/1995	Designates approximately 110 acres as MA-9d, Special Wildlife Habitat, in the Heart Planning Area on the Oakridge RD.
28	11/29/1995	Designates the electronic site as a Special-Use-Permits area (MA-13a). Prior to this decision the site was located within Scenic-Modification Middleground (MA-11a). For specifics see Santiam Cellular Environmental Assessment and Decision Notice.
29	01/12/1996	Expand the current Special-Use-Permit area (MA-12b) from 732 acres to 802 acres. Master Plan provides for improvements to the alpine ski facility, as well as adding other year-round recreational opportunities. For specifics see the Hoodoo Master Plan FSEIS and ROD.
30	04/17/1996	Within the Browder Cat timber sale boundary, decreases riparian reserve widths to 50 feet for both sides on four intermittent streams within and adjacent to harvest units and establishes riparian reserves of 175 feet for both sides on two perennial non-fish bearing streams adjacent to a proposed unit.
31	05/15/1996	Established the Rigdon Point RNA.
32	09/04/1996	Decreases the interim Riparian Reserve widths 21 acres for Class IV streams and 5 acres for Class III within the Augusta Timber Sale Planning area located in South Fork McKenzie Tier 1 Key Watershed.
33	01/23/1997	Assigns a management area to recently acquired land in the following way: 13 acres to McKenzie River Wild and Scenic River corridor (MA 6d), 11 acres to Scenic Partial Retention/ Middleground (MA 11c) and .25 acres to Special Interest Area (MA 5a).
34	01/23/1998	Changes approximately 1,900 acres of land from Scenic Modification/Middleground (MA 11a) to General Forest (MA 14a) and removes 275 acres of inventoried roadless area on the Middle Fork Ranger District.

Amendment	Implementation Date	Type of Change
35	5/17/1997	Temporarily reduced winter range cover for elk in a high elk emphasis area below the 0.5 Habitat Effectiveness rating required by S&G FW-149 in the Robinson-Scott project area.
36	07/08/1997	Establishes new S&Gs for four sensitive plant species; Gorman's aster, *Aster gormanii;* Common adders tongue, *Ophioglossum pusillum;* selected populations of tall bugbane, *Cimicifuga elata;* and selected populations of Umpqua swertia, *Fraseran umpquaensis.*
37	05/19/1997	Assigns initial allocations for about 2,180 acres of acquired lands located on Detroit and Sweet Home Ranger Districts.
38	01/21/1998	Changes management emphasis to provide for a proposed action to build a replica fire lookout station museum on the Lowell Ranger District.
39	06/01/1998	Establishes two new communication sites on the Sweet Home Ranger District. The development involves less than 1/4 acre.
40	07/13/1998	Establishes the 2,877 acre Torrey-Charlton Research Natural Area (RNA). The RNA spans over both the Willamette and Deschutes National Forests.
41	08/24/1998	Establishes two new communication sites on the Detroit Ranger District. The development involves less than 1/4 acre.
42	08/30/1999	Allows the Forest to continue a program of noxious weed treatment based on the type of infection.
43	02/15/2000	Changes, in Christy Basin, approximately 1,060 acres of MA 14a (General Forest) to MA 9b (Pileated Woodpecker habitat). Also a slight modification of MA 10e (Dispersed recreation) with no net change in acreage.
44	12/21/2001	Established the Waldo Lake Management Plan which addressed management issues in and around the lake. ***This decision has since been rescinded.***



WHITE BREASTED NUTHATCH, *Sitta carolinensis*

Forest Plan amendments

Forest Plan Amendments (discussed above) change decisions made by the Forest Plan, consequently, they also require environmental analysis under the National Environmental Policy Act (NEPA). From time to time other changes to the Forest Plan are needed which are not intended to affect earlier decisions or Plan objectives. Examples of such changes include corrections; clarification of intent; changes to monitoring questions; and refinements of management area boundaries to match management direction with site-specific resource characteristics at the margin. We call these types of changes "Updates." Since they do not change any Plan decision, they do not require NEPA analysis.

There have been eight updates to the Forest Plan:

Update	Implementation Date	Type of Change
1	07/06/1993	Makes two minor management area boundary adjustments on the Oakridge Ranger District (RD).
2	10/18/1993	Clarifies the Forest-wide S&Gs for prescribed fire in nonwilderness.
3	10/18/1993	Updates and reprints the Forest's Monitoring Tables from Chapter V of the Forest Plan. Eliminates duplication, improves clarity, and refines data, and analysis requirements to better address monitoring concerns.
4	10/17/1994	Special Forest Products (SFP) Table IV-32a shows a type of collection allowed by a management area. To clarify that the exclusion of commercial SFP collection applies only to the large, mapped Late-Successional Reserves (LSR) and not to all of the owl activity centers that are now 100-acres LSRs.
5	12/15/1995	Clarifies the role of natural fires in Wilderness. Insures direction for prescribed natural fire is consistent with Wilderness policy through adjustments to the Forest Management Goals, Desired Future Condition, Forest-wide S&Gs, Management Area prescriptions, and Monitoring Questions.
6	01/23/1997	Updates the Forest Plan Map of Record with changes to Swift Creek (MA 10f); corrections to 100 acre Late Successional Reserves (MA 16b), an AMA designation correction (MA 11f to MA 17), and a Hoodoo Master Plan boundary correction (MA 12b).
7	08/31/1998	Updates the Forest Plan Map of Record with refinements to the LSR222 boundary, establishment of MA 13B for the Middle Fork Ranger Station, the incorporation of Pileated Woodpecker and Marten areas, changes to 7 owl cores on the McKenzie RD and one on the Lowell Ranger District, the location of the already established Huckleberry Lookout (MA 13b) onto the Map of Record, the assignment of management allocations to newly acquired private land, refinements to the boundary of the McKenzie work center.
8	04/03/2000	Updates the Forest Plan Map of Record with RNA boundary refinements, the creation of Ma 1 for Opal Creek Wilderness and MA 2C for Opal Creek Scenic Area; an update that finalizes the boundary of the North Fork of the Middle Fork Wild and Scenic River, small refinements of the Forestwide wilderness boundaries, an LMP layer adjustment to reflect private land changes, adjustments to the boundary of Hills Creek LSR to allow scenic enhancement activities, and the creation of a MA 6b for the Elkhorn Wild and Scenic River.
9	04/09/2001	Documents the change of Inventoried Roadless Area maps from paper copies to an electronic Geographich Information system layer in the Forest Planning records.
10	10/17/2002	Updates the Forest Plan Map of Record with a Guistina Land Exchange of 173 acres for 237 acres; correct Shadow Bay campground from 12a to a 12b; vertical integration of administrative boundaries; update with the Finberry Timber Sale, correct the Three Creek RNA boundary; change land allocation from 11c to 13a at Carmen Air Quality Monitoring Site; reflect the Drury Land Purchase of approximately 28 acres; add names of special features into the layer, change an allocation from 14a to 12a on Timber Butte Lookout; and finally add the boundaries of the seed orchards.

R6–WILL–008-03