USDA FOREST SERVICE NEZ PERCE NATIONAL FOREST

# Fourteenth Monitoring and Evaluation Report

EXECUTIVE SUMMARY FOR FISCAL YEAR 2001

### INFORMATION REQUESTS AND COMMENTS

Information requests or comments about the Nez Perce National Forest's Land and Resource Management Plan and/or Annual Monitoring and Evaluation Report can be directed to one of the following offices:

#### Salmon River Ranger District

Slate Creek Ranger Station HC01, Box 70 White Bird, ID 83554 Phone: (208) 839-2211 TTY: (208) 839-2328 FAX: (208) 839-2730

#### **Clearwater Ranger District**

Route 2, Box 475 Grangeville, ID 83530 Phone: (208) 983-1963 TTY: (208) 983-0696 FAX: (208) 983-4056

#### **Moose Creek Ranger District**

Fenn Ranger Station HC 75, Box 91 Kooskia, ID 83539 Phone: (208) 926-4258 TTY: (208) 926-7725 FAX: (208) 926-7119

#### **Red River Ranger District**

Elk City Ranger Station Elk City, ID 83525 Phone: (208) 842-2245 TTY: (208) 842-2233 FAX: (208) 842-2250

#### Nez Perce National Forest Headquarters Office

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### INTRODUCTION

This document highlights the major issues (and findings regarding those issues) that are reported in detail in the Forest's 14th Annual Monitoring and Evaluation Report (pertaining to fiscal year 2001). Upon request, a copy of the Nez Perce National Forest's 14<sup>th</sup> Annual Monitoring and Evaluation Report (the detailed technical report) will be sent to you. Contact the Nez Perce National Forest Headquarters' Office for a copy. Copies are also available for review at any of the Forest offices listed on the previous page and on the Forest's web page @ www.fs.fed.us/r1/nezperce/

This document is organized by resource. Four questions are addressed for each resource:

- 1. What did we accomplish?
- 2. What outputs and/or work was planned that did not get accomplished?
- 3. What practices need to be changed based on monitoring results?
- 4. What is the current condition and trend of the resource when compared to the desired condition?

The National Forest Management Act (NFMA) of 1974 states that Forest Plans "...be revised from time to time when the Secretary finds conditions in a unit have significantly changed, but at least every 15 years." The current Forest Plan revision is scheduled to begin early in fiscal year 2003 (October 2002). We hope to issue a Revised Plan and Record of Decision by September 2006.

Identification of needed changes to the Forest Plan is one of the first steps in the Forest Plan revision process [36 CFR 219.12]. This summary will be used as a tool in this identification process. You are encouraged to keep this document for future reference and use during the public involvement phase of the Forest Plan revision process.

Finally, feedback from you, the owners of the Nez Perce National Forest, is very important. How do you like the format of the Executive Summary? Do you have any suggestions for improvement? Are there things we missed or overlooked? Are there things you would like to see added to next year's report? If you have written comments, please send them to me:

#### Bruce E. Bernhardt, Forest Supervisor Nez Perce National Forest Rt. 2, Box 475 Grangeville, ID 83530

We would also be glad to speak with you in person. Feel free to call us at (208) 983-1950, or visit any of the forest offices to share your comments.

<u>/s/ Bruce E. Bernhardt</u> BRUCE E. BERNHARDT, Forest Supervisor Nez Perce National Forest <u>June 20, 2002</u> Date

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### ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

#### 1) What did we accomplish?

The Forest has plans on file to renovate a family residence at the Fenn Ranger Station for accessibility. Work has begun on conceptual plans for renovating a bunkhouse and a family residence for accessibility at each ranger station.

The new accessible office and visitor center at Fenn Ranger Station is on the Northern Region's priority list for capital construction funding, but funding has been deferred to 2002 (when it will be the #1 Forest priority). The construction contract for this facility is to be awarded by the end of FY 2002. When the building is completed we will be able to provide accessible visitor services and barrier free employment at all our administrative sites.

A new accessible warehouse at the Grangeville Air Center has been built. We are in the process of finishing the inside of this building, including office space for the helitack operations, a pilot's lounge, office, and shop space for the tanker base manager, and restrooms with showers as well as storage space. Expected completion of this project is May 2002.

A ramp has been constructed at the Slate Creek Ranger Station and will provide access for all to the museum. The sidewalk portion will be completed in FY 2002.

#### 2) What outputs and/or work was planned that did not get accomplished?

We did not get as far as we had hoped with the administrative site accessibility surveys and transition plans. National requirements for deferred maintenance reporting drained budgets and limited available time. This will continue for at least two years. However, we anticipate that all surveys and transition plans for our administrative sites will be completed by 2001.

The sidewalk portion of project to provide access for all at the Slate Creek Ranger Station museum was not completed; it will be completed after archeological concerns are addressed.

#### 3) What practices need to be changed based on monitoring results?

As Forest positions become vacant we need to actively recruit persons with disabilities.

# 4) What is the current condition and trend of the resource when compared to the desired condition?

Forest-wide, three recreation sites (including a fishing area) are accessible at the **Easy** level, another four sites are accessible at the **Moderate** level, and twenty sites are accessible at the **Difficult** level. Red River Ranger District has a hunting program for folks with mobility impairments; the program is coordinated with the Idaho Department of Fish and Game. The goal is to provide accessible opportunities throughout the entire spectrum of recreation on the Forest. We are making progress, but much remains to be done.

The Forest headquarters office and all district offices (except Fenn Ranger Station) are now accessible to everyone. The goal is to provide accessible offices and residences at all our administrative sites. The trend is positive, but we are not there yet.

### AIR RESOURCES

#### 1) What did we accomplish?

A key component of the Region 1 Air Resource Monitoring Program is the monitoring of lake chemistry, which is quite reactive to atmospheric processes. In FY 2001, Phase III monitoring of wilderness lakes to determine trends in acid deposition and other atmospheric related changes to lake ecosystems were done. Shasta Lake in the Selway Bitterroot Wilderness has stable to slight upward trends in pH, ANC, and conductivity.

No active sampling of air quality was done on the Forest. However, Sula Peak, to the east of the Forest, monitored fine mass concentration of air that passed over the Forest.

The Forest supported air quality forecasting through daily balloon launches during the fall burn period, and through coordinating smoke management reporting for north Idaho.

#### 2) What outputs and/or work was planned that did not get accomplished?

Currently the Forest has completed all planned monitoring of air resources.

#### 3) What practices need to be changed based on monitoring results?

A particulate sampler should be installed as funds become available in the interior of the Forest to gather data to identify impacts to communities.

# 4) What is the current condition and trend of the resource when compared to the desired condition?

Currently the air quality on the Forest is good and monitoring does not indicate any significant deterioration from desired condition. However, impacts from any new stationary sources will have to be evaluated for their impacts to Class I airsheds.

A national initiative to substantial increase hazardous fuels treatments in short fire return interval ecosystems on federal land would produce a corresponding increase in smoke and particulate matter, if the only treatment is prescribed fire. Future hazardous fuels project proposals should include tradeoff analysis of prescribed fire v. mechanical treatments to assess the smoke effects.

### FACILITIES

#### 1) What did we accomplish?

Drinking water was monitored monthly for bacteriological contamination at all 13 operating potable water systems managed directly by the Forest Service. All required drinking water chemical testing was performed. Safe drinking water was provided at all systems where potable water is available.

Wastewater discharges were monitored at all three sewage treatment plants. Effluent at all three locations met water quality requirements.

Construction work completed in 2001 included the Grangeville Air Center loft addition and a new warehouse. The planned new accessible visitor information/meeting/office building at the Fenn Ranger Station was added to the Region's capital investment plan and is scheduled for construction in 2002.

Major repair and maintenance projects included a main underground power line replacement at Red River Ranger Station and installation of a water meter to record water usage at the Elk City Ranger Station for the local water district. Routine maintenance assured that all buildings in use met basic structural and public health standards.

Radon and asbestos monitoring and mitigation continued. There is still some friable asbestos in a few buildings, but neither radon nor asbestos is a current health hazard at any Forest Service owned residence.

#### 2) What outputs and/or work was planned that did not get accomplished?

Funding levels preclude fully maintaining the entire transportation system. Maintenance needs continue to be evaluated and prioritized on both an annual basis and as weather events dictate.

Due to problems with aging water collection and distribution systems along the Selway River, four small campground water systems remain closed. Alternatives for providing potable water are being evaluated.

#### 3) What practices need to be changed based on monitoring results?

Buildings and administrative sites do not have Forest Plan monitoring requirements. When problems are discovered during inspections or monitoring we correct them as funding permits. This practice seems to work well and does not need to be changed.

# 4) What is the current condition and trend of the resource when compared to the desired condition?

Currently, the Nez Perce National Forest buildings, water systems, wastewater systems, and administrative sites are in acceptable condition, with the few exceptions noted above. However, as buildings and systems age, they require more upkeep each year. Since funding for maintenance has not increased in relation to inflation, it becomes a greater challenge each year to maintain structural, health, and safety standards. The Forest

Service is addressing this issue nationally and it is hoped that maintenance funding will increase in the future. The Forest is evaluating needs and costs on an ongoing basis to assure that we are not maintaining unneeded facilities. Opportunities for ongoing cost savings are being continually pursued.

### FISHERIES

#### 1) What did we accomplish?

Projects that will result in an improvement in fish habitat condition on the Forest were accomplished (see monitoring element 1f).

Cooperative restoration work with the Nez Perce Tribe, in Meadow creek and Mill Creek, continued.

Habitat and species inventory and monitoring projects were accomplished.

Cooperative project with IDFG, including continued work on bull trout distribution and status, were continued.

Support to other resource activities was provided to minimize negative effects, and where possible provide positive benefits to the aquatic resource.

#### 2) What outputs and/or work was planned that did not get accomplished?

In general, the planned work was accomplished.

#### 3) What practices need to be changed based on monitoring results?

The results of monitoring continue to be used to adjust the priorities and activities on the Forest to contribute, to the extent possible, to the aquatic resource condition on the Forest. There are no monitoring results available at this time that identifies the need to make large-scale changes in practices on the Forest.

# 4) What is the current condition and trend of the resource when compared to the desired condition?

The fisheries resource on the Nez Perce Forest has long been recognized as a very valuable and important resource. The Forest Plan established fish/water quality objectives for the subwatersheds (6<sup>th</sup> code hydrologic units) on the Forest that considered the relative potential and value of each area with respect to aquatic resources, along with other resources. The Forest Plan also recognizes that some of these areas do not meet the objective, or desired condition, established by the Forest Plan. These conditions are a result of many factors, including historic activities. There are a large number of opportunities on the Forest to resource the aquatic resource conditions, many of them complimentary with other resource priorities on the Forest.

# HERITAGE RESOURCES

#### 1) What did we accomplish?

During 2001, 20 new cultural properties/sites were discovered and recorded on the Forest.

8,512 acres were inventoried for cultural resources.

In addition to the new sites recorded, 73 previously recorded sites were revisited or monitored.

#### 2) What outputs and/or work was planned that did not get accomplished?

A schedule based on 1-5 year intervals needs to be established for monitoring of all National Register of Historic Places (NRHP) eligible heritage resources. This was not accomplished in 2001.

An increase in the Heritage budget is needed in order to effectively monitor the recorded NRHP eligible cultural resource sites on the Forest. The current budget does not allow for detailed recording of site changes during monitoring. Under the current practices sites may be monitored, but the time and money needed for the proper documentation of changes in the sites' condition are not provided.

#### 3) What practices need to be changed based on monitoring results?

None

# 4) What is the current condition and trend of the resource when compared to the desired condition?

Currently cultural resource sites are minimally evaluated for their eligibility to the NRHP, mostly through surface inspection. In the future a more thorough evaluation-testing program comprised of formal subsurface excavation units needs to be implemented in order to formally determine a site's National Register status/eligibility.

# LANDS AND SPECIAL USES

#### 1) What did we accomplish?

INFRA Special Use Data System (SUDS) was maintained and monitored.

The Forest administered the "Open Season" concept for special use permits and applications.

The status of special use permits and applications was reviewed and actions prioritized.

Four miles of Forest boundary were surveyed and posted to standard.

Maintained 25 miles of Forest Boundary.

Five permit applications were processed.

#### 2) What outputs and/or work was planned that did not get accomplished?

Renewal of expired Special Use Permits and processing of 4 permit applications.

The Forest did not address any of the unauthorized uses.

#### 3) What practices need to be changed based on monitoring results?

Additional funding and staffing is needed to address the number of unperfected right-ofways to public lands in a timely manner. Additional funding and staffing is also needed to process permit renewals and applications.

The Forest needs to prioritize the unauthorized uses and prosecute cases both under the statutes and title. RS-2477 validations by the county continue to make management of Forest access a problem.

# 4) What is the current condition and trend of the resource when compared to the desired condition?

The Forest's progress in dealing with unperfected right-of-ways is slow.

The Forest is unable to address both expired permits and permit applications in a timely manner.

### MINERAL RESOURCES

#### 1) What did we accomplish?

Forest personnel were able to perform basic administration, minimize unnecessary surface disturbances, and inspect unauthorized mining operations.

#### 2) What outputs and/or work was planned that did not get accomplished?

Due to the complexities of consultation under ESA, a lot of time and effort was put into processing plans and less effort into inspection of small, ongoing operations.

There were delays in the processing of plans of operations and notices of intent due to great analysis needs and the need for input from fisheries specialists.

#### 3) What practices need to be changed based on monitoring results?

More efficient methods need to be developed to process and administer mining operations in anticipation of continuing shrinkage of the workforce and increase in complexity of issues. Also, inter-governmental and agency authorities and actions need coordination and streamlining throughout Idaho.

# 4) What is the current condition and trend of the resource when compared to the desired condition?

The current trend is toward the desired conditions. The Forest was able to keep up with basic administration of mining activities. A shrinking workforce and the increasing complexity of issues (such as consultation under the Endangered Species Act) combined with rights under the 1872 mining law, contribute to difficulties in meeting regulation timeframes for processing new plans, adequately inspecting ongoing operations, and assuring that bonds are revised or released on a regular basis.

### PUBLIC INVOLVEMENT

#### 1) What did we accomplish?

#### GENERAL:

The past year had even more opportunities for public involvement on the Forest, specifically during the Meadow Face Stewardship meetings, the Urban Interface/Defensible Space Public Meetings held as part of the National Fire Plan objectives and the Resource Advisory Committee selection. There were numerous public involvement efforts related to other specific projects. Techniques ranged from media ads to traditional scoping letters, public information meetings, and public comment forums. There were project-related displays, field trips, open houses, and news releases.

Various field trips were coordinated with local media and several were conducted throughout the year. Topics included: Mountain pine beetle outbreaks in the Red River drainage, Grangeville Air Center, the Earthquake Fire base camp and Wildland Fire Use on the Moose Creek Ranger District.

#### STEWARDSHIP:

A comprehensive public involvement plan has been developed for the Meadow-Face NEPA analysis with all potentially interested and/or affected publics participating. The Draft Environmental Impact Statement was released in May 2001. A public field trip to the Meadow Face Stewardship Pilot Project area on May 19, 2001 and an open house held on May 31, 2001, are two examples of the open communication process that we are using.

The Nez Perce National Forest is initiating contract development for proposed activities associated with the Meadow Face Stewardship Pilot Project. This project is one of 18 pilot projects in the Northern Region authorized to test new contracting methods. These methods include combining service and timber sale contracts to accomplish more work with fewer contracts, and less money exchanging hands.

#### PLANNING:

<u>Resource Advisory Committee (RAC)</u>: The Nez Perce and Clearwater National Forests distributed a release in April 2001 to accept nominations from individuals wishing to serve on the North Central Idaho Resource Advisory Committee. Fifteen local citizens and three replacements (from Idaho, Clearwater, Lewis, Nez Perce and Latah counties) were recommended by the Forest Supervisors to the Secretary of Agriculture and were chosen to serve on the RAC committee. The Craig-Wyden Act of 2000 was designed to stabilize payments received by counties for schools and roads. The RACs will recommend forest management projects to the Forest Service and be one of our most diverse public participation processes thus far.

<u>Canada Lynx Amendment</u>: In April 2000, the Canada lynx was listed as a threatened species. In September 2001, the forest began its 45-day scoping/public comment/issue identification period. The purpose and need for the proposed amendment is to establish land management direction that conserves and promotes recovery of the Canada lynx. The Nez Perce National Forest held its open house at the Supervisor's Office on October 2, 2001.

<u>Quarterly NEPA Report</u>: We continued to publish and improve the Quarterly Schedule of NEPA Projects. This publication, which is mailed four times a year to nearly 300 interested individuals, includes information about proposed projects. Persons with an interest in the management of the Nez Perce National Forest should ask to be included on the mailing list. The current and previous quarterly report can be accessed electronically at our homepage at: <u>www.fed.us/r1/nezperce</u>.

<u>Forest Plan Revision</u>: The Forest is scheduled for Forest Plan Revision in FY 2003. We are zoned with the Clearwater National Forest for this revision effort. The two forests have been coordinating sources, structure, and types of information that will be needed for revision. The Planning Unit Assessments (Sub-basin assessment) (PUA) will be used as building blocks for revision. The Nez Perce Forest will complete its last PUA (Salmon Sub-Basin) by January 2002.

#### **INFORMATION AND EDUCATION:**

There are many forest events and programs held throughout the year that stimulate public involvement, the highlights include:

- Archaeology Week
- Wildflower week
- Border Days Parade in Grangeville
- Nez Perce County Fair in Lewiston
- Idaho County Fair in Cottonwood
- Idaho County Sportsman Show in Grangeville
- Bighorn Sportsman Show in Spokane
- Horse Council in Boise

#### Programs:

- Fire Squirts Camp at Red River
- Fishing Derbies at Clearwater, Red River, and Moose Creek Districts
- ✤ 7<sup>th</sup> Grade Field Trip
- Syringa General Hospital Wilderness Education Program
- ✤ 5<sup>th</sup>/6<sup>th</sup> Grade Fish Creek Camp
- Water Awareness Week (water conservation for 6<sup>th</sup> grade students)

#### Other:

Trailhead Hosts/Field Contacts

#### FIRE:

In January 2001, the Nez Perce Forest distributed a news release announcing that funding was available to replace fences that were burned during Fire Season 2000. One application was received from a private property owner in the Burnt Flats Fire area and eleven applications were received from private property owners in the Maloney Fire area. All landowners were reimbursed by the end of June 2001.

Urban interface specialists were available to work with private landowners and rural fire protection districts on wildland urban interface education and identification of issues. Three public meetings were held in July at Elk City, White Bird, and Grangeville.

The Forest worked with eight area high schools to produce Smokey and Athlete posters.

One of our most notable accomplishments this season was the excellent cooperation between fire protection agencies, the public and private companies. The efforts of this group, including rapid reporting, quick suppression, thorough mop-up, and great logistical support, undoubtedly limited the acres of private and public lands burned and in several cases saved structures from burning.

#### 2) What outputs and/or work was planned that did not get accomplished?

All targets were met. However, the General Management Review scheduled for September 2001, was postponed until June 2002 due to wildland fire activity.

#### 3) What practices need to be changed based on monitoring results?

A public involvement plan should be developed for each project. This plan should include objectives, identify potentially affected or interested public, and focus on techniques that will match the needs of the public.

# 4) What is the current condition and trend of the resource when compared to the desired condition?

The trend in public involvement is to move toward a collaborative approach as shown in all of our examples above (Stewardship, National Fire Plan, RAC, Lynx Amendment, etc.). This approach will require careful coordination with special interest groups on each of our high priority projects outlined in our annual Program of Work to reach the desired condition.

### **RECREATION RESOURCES**

#### 1) What did we accomplish?

The Forest continued use of a new financial reporting system that required the completion of a new trail and recreation database.

Forest personnel conducted a physical inventory of recreation and trail assets (20% a year).

Continued Recreation Fee Demo Program, which includes most of the current fee campgrounds and the cabin rental program.

Cooperated with Idaho Department of Parks and Recreation, Idaho County Snowmobile Advisory Committee, High Country Snowmobile Club of Elk City, Valley Cats Snowmobile club of Kooskia, and Sno-Drifters Snowmobile Club of Grangeville to groom 330 miles of snow trails in State Snowmobile Grooming Areas 25A and 25B.

Cooperated with Idaho Parks and recreation in the Park N' Ski program to provide for seven miles of groomed and tracked cross country ski opportunities on the Forest.

The Forest worked with a variety of volunteer groups and individuals to complete trail maintenance, trail reconstruction, and rehabilitation, signing, campground maintenance, and visitor contacts. These volunteers were members of organizations representing motorized trail vehicles (4-wheelers, motorcycles, snowmobiles), stock users, youth groups, and Tribal youth/young adults. Many individuals not associated with organized groups also volunteer their skills to assist with the accomplishment of many recreation-associated tasks.

Administered 65 recreational special use permits for outfitters and guides, recreation events, resort and vender permits.

Continued rental cabin program.

Coordinated efforts with Salmon/Challis National Forest to better manage river patrols on the Salmon River

Personnel administered scenic easements on the Salmon and Selway rivers.

Completed challenge cost share/partnership projects with Idaho Whitewater Association, Mountain Cove School, and the Girl Scouts of America. Projects involved campsite cleanup and noxious weed control on the Main Salmon River.

Maintained developed recreation sites, including campgrounds, boat ramps, and swimming areas.

#### 2) What outputs and/or work was planned that did not get accomplished?

Due to lack of funding and personnel, the only new recreation special use permits issued on the Forest were for 1-3 day recreation events.

#### 3) What practices need to be changed based on monitoring results?

Inventory Off-Road-Vehicle (ORV) impacts, particularly those created by All Terrain Vehicle (ATV) use, both on and off trails.

Continue development of system that will provide better estimates of the number and kind of recreation users the Forest is serving.

Conduct a comprehensive review of Recreation Opportunity Spectrum (ROS) changes.

# 4) What is the current condition and trend of the resource when compared to the desired condition?

While the national trend in recreation use is increasing, recreation dollars to the Nez Perce National Forest have been declining over the past several years. The effects of increased national regulation, high level planning costs, fixed overhead costs, and inflation, aggravate the budget situation. These factors continue to negatively influence the amount of funds available to unit recreation programs. The result has been a loss of permanent and seasonal recreation positions, a reduction in the service and maintenance of recreation facilities, a reduced recreation special use program, and fewer miles of trails maintained.

Despite the reduced funding and loss of positions, the Forest managed to keep all recreation facilities open. This was largely due to the dedication of Forest employees, along with grants, partnerships, and help from volunteers.

It is projected that recreational use within the national forest system will continue to increase in the near future. It is safe to assume that recreation use on the Nez Perce National Forest will follow this trend. This will present a challenge as recreation budgets are projected to be flat or slightly lower over the next three to five years. The recreation and recreation trails programs might be affected in several ways, including:

- Service and maintenance will be a minimum levels
- Some campgrounds may be closed
- The Forest will lose some of its investment in recreational facilities
- Fewer miles of trails will be maintained
- The ability to process recreation special use applications will be curtailed.

Given the recreation projections, it will be incumbent upon the Forest to determine the needs of the public and organize to meet those needs to the fullest extent possible. It should be realized, however, that the recreation programs of the near future might be very different from the current approach to recreation management.

### **RIVER RECREATION RESOURCES**

#### 1) What did we accomplish?

Monitoring of the River recreation resources is required every year as directed in the Forest Plan (V-7). The monitoring was competed for FY 2000. The raw data is available at the Slate Creek Ranger Station. The results of these monitoring efforts are to be reported every five years. The rationale behind these reporting requirements is that while change may occur incrementally with these resources, trends are better explored over longer periods of time. Monitoring results for this resource were reported last year and will be reported again in the FY 2004 report, in order to better display the use and management trends on the river resources.

#### 2) What outputs and/or work was planned that did not get accomplished?

A complete review of our monitoring efforts will be reported in the FY 2004 Monitoring Report (which will be published in 2005).

#### 3) What practices need to be changed based on monitoring results?

A complete review of our monitoring efforts will be reported in the FY 2004 Monitoring Report (which will be published in 2005).

# 4) What is the current condition and trend of the resource when compared to the desired condition?

A complete review of the social, ecological, and administrative trends will be reported in the FY 2004 Monitoring Report (which will be published in 2005).

### SOIL AND WATER RESOURCES

#### 1) What did we accomplish?

Sixty-two acres of soil and water improvement projects were accomplished using a variety of funding sources. The assigned target was 10 acres. The Forest Plan goal is 200 acres per year.

Water quality and stream flow monitoring was conducted at eight stations.

Implementation or effectiveness monitoring was documented on four timber sales, one road obliteration project, one wild fire, one mine rehabilitation project, and one instream habitat improvement project.

#### 2) What outputs and/or work was planned that did not get accomplished?

Most project monitoring was qualitative rather than quantitative due to the funding constraints and work priorities. Several watershed improvement projects were delayed due to other work priorities and lack of staff.

#### 3) What practices need to be changed based on monitoring results?

The Forest's watershed improvement program is suffering from a lack of funds to implement identified projects. Additional emphasis should be given to securing funds from sources internal and external to the Forest Service to accomplish these projects.

When designing road decommissioning or road-to-trail conversion projects, it is generally most effective to recontour the road prism as fully as possible if the primary goal is site and watershed recovery.

Single season temporary roads have limited utility on timber sales due to difficulties of operating in short time frames. Single season restrictions are a valuable tool, but should only be prescribed if they are feasible.

Criteria for meeting soil quality standards should be consistent between the logging, slash disposal, and site preparation phases of treatment.

# 4) What is the current condition and trend of the resource when compared to the desired condition?

Watershed condition has probably improved gradually in most watersheds over the past decade, because of marked reductions in road construction and logging, and reduction of mining and grazing impacts. Recovery has been primarily natural. Watershed improvement projects within the last few years have become more ambitious in scope, including road obliteration and decommissioning, as well as mine reclamation projects and channel and valley bottom restoration projects. Staffing and funding limitations have limited accomplishments, as has priority of other work.

Subbasin-scale assessments identify the need to more highly emphasize restoration in certain key watersheds to recover aquatic habitat potential. Developing a coordinated strategy could increase recovery effectiveness. Recovery rates could be improved by giving higher priority to restoration in program planning and implementation.

### WILDLIFE RESOURCES

#### 1) What did we accomplish?

We successfully partnered with Rocky Mountain Elk Foundation for project work on the Forest.

Discovered natural risks and initiated adaptive types. Forest personnel have begun designing and implementing catastrophic fire risk reduction and ecosystem restoration treatments incorporating timber harvest/thinning and/or prescribed fire plans as tools, i.e. Salmon River Canyon fire project, Meadow Face Stewardship Project, and Clean Slate Project.

We continue to use biocontrol agents to help suppress noxious weed infestations affecting native plants and big game ranges.

Rejuvenated and enhanced forage production for big game using timber harvest, thinning, and prescribed fire.

We completed suitability habitat mapping for lynx on the Forest. In addition, we continued implementation of conservation measures identified in the Lynx Conservation Assessment and Strategy. A public open house was conducted to initiate the Forest Plan Amendment for Canada lynx.

Reviewed effects of land management activities on federally listed species and prepared 89 biological assessments and evaluations to meet ESA requirements. We informally consulted with U.S. Fish and Wildlife Service in potential conflict circumstances.

Initiated broad-scale habitat inventories in ponderosa pine and dry Douglas fir cover types (on burned and unburned sites), for Neotropical migratory birds on the Forest. Forest personnel continued coordination and data sharing across the Northern Region to address associated, emerging international biological diversity issues related to land birds.

#### 2) What outputs and/or work was planned that did not get accomplished?

Prescription burning of big game winter range acres fell short of Forest Plan objectives by about 2,600 acres for FY2001.

Population trend monitoring of pileated woodpecker did not get done.

Timber harvest treatment on big game winter ranges again fell short of Forest Plan goals for FY2001.

#### 3) What practices need to be changed based on monitoring results?

Population trend monitoring of elk, big horn sheep, and moose should be dropped as Forest Service monitoring items since these species are regulated principally through hunting and are carefully managed and monitored by Idaho Department of Fish and Game.

Drop individual Management Indicator Species and replace with various species complexes or groups that exhibit common (within group) thematic requirements, but are diverse and complementary (between groups) in overall habitat needs. Utilize GIS technology for landscape perspective.

Incorporate and formally adopt the north Idaho old-growth standards, rather than the generalized standards that exist in the current Forest Plan.

Change snag monitoring to become a coordinated, joint effort among wildlife/timber/fire and fuel wood administration disciplines to ensure greater integration.

Change road density monitoring (i.e. open/closed roads and trails) to a multi-resource monitoring element using GIS technology. Consider adapting habitat effectiveness monitoring for elk (summer), forest carnivores, grizzly bear habitat, and other human-activity-adverse species to use this single variable.

Incorporate habitat diversity (vegetation communities/successional stages status) as a new, GIS-tracked, multi-resource monitoring element Forest-wide.

Secure additional staff time and resources now spent on listed species population monitoring to more fully gather and monitor baseline data on emerging sensitive species and biodiversity issues.

Drop the monitoring of grand fir/Pacific yew (designated management area #21 in the Forest Plan) communities due to major shifts in forest management and harvest strategies away from clear-cut/burn techniques.

# 4) What is the current condition and trend of the resource when compared to the desired condition?

Lower elevation habitat types and "protected" old growth areas are too heavily stocked and fuel rich to remain self-sustaining in the long term without active fuel reduction using intermediate harvests, reintroduction of fire or both. Several sensitive species as well as numerous Neotropical migrant birds may be in decline partially because of the accumulation of acres that have had natural fire processes interrupted in these habitats.

Most federally listed terrestrial species (with the exception of lynx) are in relatively good condition with upward trends. Recovery for bald eagles and wolves is on schedule or ahead of schedule. Peregrine falcons were delisted in 1999. Grizzly bear reintroduction and recovery has been indefinitely shelved by Interior Department.

Current condition and trend of several sensitive species and some emerging biodiversityissue species (i.e. neotropical migrant birds) are under-studied and poorly understood from the landscape perspective.

Big game winter range conditions and forage distribution is being cited along with summer forage conditions as a key factor in slow recovery of local elk population numbers from heavy hunting pressure and effects of predator numbers. . Forest carnivores including wolverine, wolves, lynx, and other species have no doubt been indirectly affected by past fire exclusion and unchecked forest succession in many habitat types.

# **VEGETATION MANAGEMENT**

# FIRE AND FUELS

#### 1) What did we accomplish?

The Forest continued successful implementation of the Federal Wildland and Prescribed Fire Management Policy on the Forest in FY 2001. This included the use of appropriate management response, wildland fire use, and management ignited prescribed fire to meet Forest Plan goals, standards, and expectations.

A Programmatic Biological Assessment of the Fire Management Program for Fall Chinook Salmon, Spring/Summer Chinook Salmon, Steelhead Trout, Bull Trout (ESA listed species), and Spring Chinook Salmon, Westslope Cutthroat Trout (USFS sensitive species) continued to be implemented.

National Fire Management Analysis was completed in 1997, establishing a most cost efficient level (MEL) for the Nez Perce National Forest. This analysis helps establish the annual level of funding for fire protection. The Forest was funded at MEL and followed the Region One Workforce Plan to hire additional seasonal firefighters.

The FY 2001 fire season was very active in the Northern Region. Fire danger indicators reached the high and very high levels earlier than normal and continued to climb until all stations were reporting extreme values. Very high fire danger was caused by a long period that was nearly rain-free. The dry summer weather had fewer thunderstorms than normal, which limited the number of lightning caused fires.

Fire	Administrative Unit(s)	Acres
Taco	Salmon River RD	3,350
Earthquake	Clearwater RD	1,260

All wildfires on the Forest were successfully managed under appropriate management response policies. Lightning fire starts and, therefore, total fire starts and total acreage were well below average. Human caused fire starts and acreage burned were above average.

Nez Perce NF	Fires	Ten Year Average	Acres	Five Year Average
Total	99	173	11,989	7,771
Human Caused	14		1,376	
Lightning (AMR)	68		3,364	
Wildland Fire	17		7,249	
Use				

An uncharacteristic late thunderstorm caused ignitions that were managed for benefits in the Selway Bitterroot Wilderness. The 10-year trend for managing natural ignitions for resource benefits shows an increase.

The natural fuels/hazardous fuels reduction program exceeded the Forest Plan projected output of 6,265 acres for the 1998 to 2007 period by accomplishing 13,279 acres this year. This also exceeded our MAR target of 9,000 acres.

Fuel treatment from all funding sources increased slightly in FY 2001, the fifth year of program increase. The Rocky Mountain Elk Foundation contributed funding to prescribed burning projects.

The annual updates to the Fire Management Plan were distributed in June. Annual fire preparedness reviews were informally conducted this year. The rapid escalation of fire suppression work precluded formal systematic reviews. The annual Clearwater and Nez Perce Fire Zone Report was completed.

An interdisciplinary team established for the Salmon River Canyon Project continued an interagency and multi-forest effort to produce an environmental impact statement proposing 214,000 acres of prescribed burning treatments in support of hazardous fuel reduction and ecosystem management.

The Red River Ranger District reviewed the post treatment effects of the Elkhorn Jersey Project. The project is unique in that it used management ignited prescribed fire in the Frank Church River of No Return Wilderness. The review group found that project implementation was consistent with the Forest Plan, the Decision Memo for the project, and with the site specific burn plan.

#### 2) What outputs and/or work was planned that did not get accomplished?

The Brush Disposal MAR target of 1,300 acres was not met; only 1,060 acres were treated.

Planning for future projects generally fell behind schedule.

#### 3) What practices need to be changed based on monitoring results?

Monitoring of activity fuel treatment and hazardous fuels treatments should be done in an interdisciplinary setting to ensure all resource objectives are being identified and met.

More thorough and consistent monitoring of the Programmatic Biological Assessment for fish needs to occur.

Total acres treated by fire needs to be monitored (Wildland Fire Use and prescribed fire). Monitor by ecosystems (Land Type Association) to see if we are meeting objectives to maintain and sustain healthy ecosystems.

# 4) What is the current condition and trend of the resource when compared to the desired condition?

#### Appropriate Management Response

Suppression oriented responses to wildland fires are generally successful; this continues the past trend of protection of wildland resource values.

Fuel accumulation in short, moderate, and long fire interval groups has occurred with the potential result being more acres burning at higher fire intensities. The current trend toward

higher intensity fires is a departure from the historic pattern of a variety of fire intensities on the landscape.

#### **Prescribed Fire**

Fewer acres are being burned today from both planned and unplanned ignitions that burned historically (before fire exclusion policies began). The recommendations from Subbasin assessments and watershed analysis are for increased prescribed fire and/or natural fire in most ecosystems. The need is especially great in short fire return interval ecosystems. The Forest has been increasing hazardous fuels treatments and with the completion of the Salmon River Canyon Environmental Impact Statement will be positioned to significantly increase acres treated.

Field reviews indicate that the objectives of prescribed burns are being met.

Despite increases in prescribed burning, the need for fire disturbance processes identified in Subbasin assessments will not be met.

The trend for prescribed fire projects is for increasingly complex objectives, constraints, and mitigations; (i.e. air quality, Threatened and Endangered species, noxious weeds) the result of which is that future accomplishment could be constrained.

#### Wildland Fire Use

Wilderness areas where natural fires are allowed to burn are returning some areas to a more historic vegetative condition. However, these fires are burning fewer acres than were burned in the pre-exclusion era, and current fire intensities are often higher than in the past. The desired condition would be to return to historic fire regimes with greater acreages burned at lower fire intensities.

### INSECTS AND DISEASE

#### 1) What did we accomplish?

Insect and disease conditions on the Forest were monitored via aerial detection flights and field reconnaissance. This continues to contribute to the data set of historic conditions.

#### 2) What outputs and/or work was planned that did not get accomplished?

None.

#### 3) What practices need to be changed based on monitoring results?

Monitoring results indicate that the Forest is experiencing outbreaks of at least three insects that may require a shift in management priorities in order to protect and restore forest, wildlife, and aquatic resources. As this information is incorporated into watershed assessments, it will help identify specific needs.

# 4) What is the current condition and trend of the resource when compared to the desired condition?

Insects and diseases are an integral part of the ecosystem. They are part of the disturbance regime and have contributed to the makeup and structure of the forests we have now. Current outbreak levels of Douglas-fir beetle and mountain pine beetle are above desired levels. Losses of whitebark pine to white pine blister rust and mountain pine beetle are far beyond desired conditions. Mortality of subalpine fir caused by the balsam wooly adelgid and the western balsam bark beetle are increasing and could become a larger concern in the future.

### NOXIOUS WEEDS

#### 1) What did we accomplish?

Forest personnel treated 1150 acres (all methods).

Three thousand six hundred fifty insects were released across 18 sites for control of spotted knapweed and yellow star thistle. Six different insects were released.

Began weed treatment in the Frank Church River of No Return Wilderness.

Implemented weed free forage requirements and washing of off-road logging equipment as prevention practices.

The Forest continues to integrate the noxious weed program with two coordinated weed management efforts in the Salmon and Clearwater drainages.

Forest personnel were involved with federal and state agencies in implementing an interagency Weed Management Strategy for Idaho.

The Forest received a grant from the Regional Partnership Program to use hyperspectral images to detect small infestations of weeds with low canopy cover along the Salmon River Canyon. The project includes the University of Idaho, Idaho County, Idaho Department of Agriculture, and Bureau of Land Management.

The Forest, working with the University of Idaho, Forest Health Protection Group, and the Nez Perce Tribe Bio-control Center, monitored biocontrol agents for yellow star thistle in the Salmon and Clearwater basins. This work included the distribution, release and monitoring of five different insects that have been approved for release. It also incorporates vegetation monitoring as part of the management of the release sites. Noxious weed risk assessments are being incorporated into project analysis.

#### 2) What outputs and/or work was planned that did not get accomplished?

Treated noxious weed acres were only approximately three percent of the total infestations found on the Forest.

Weed management off the Forest across all lands is also far below the level necessary to slow the spread of many weeds. This has forced weed managers to strongly prioritize management efforts.

The coordinated implementation of prevention practices statewide (all lands) is poorly developed, causing ineffective and inconsistent results across a broad regional scale.

#### 3) What practices need to be changed based on monitoring results?

More emphasis and time needs to be placed on coordinating practices and treatment across all ownerships.

A long-term early alert system needs to be developed to track the introduction and spread new invasive exotic plants into the region and state.

Additional funds are needed if weed managers are to manage and treat invasive exotic plants at a biologically significant level.

Noxious weed management needs to be integrated into vegetation restoration strategies that are being implemented across all property ownerships.

# 4) What is the current condition and trend of the resource when compared to the desired condition?

Many noxious weeds and invasive exotics continue to spread across the Forest and on other lands. Low elevation grasslands, conifer savannas, and recently disturbed sites are at greatest risk for invasion by exotic plants.

Transportation corridors (trails and roads) and river systems continue to be the main vector of weed spread.

Weed management efforts are becoming more coordinated across all properties as a result of the formation of broad scale partnerships.

### RANGE

#### 1) What did we accomplish?

Basic permit administration was accomplished on 28 active allotments. Livestock grazing did not occur on 3 allotments because permittees decided not to run on the National Forest in 2001.

Implementation monitoring of the Annual Operating Instructions (AOI) was accomplished on 22 allotments.

Grazing was within allowable use levels prescribed in AOI on all but two riparian areas that were monitored. A total of 48 riparian reaches were inspected as part of the grazing monitoring program.

#### 2) What outputs and/or work was planned that did not get accomplished?

NEPA process on scheduled allotments was deferred due to increased work under Section 7 of the Endangered Species Act (ESA).

Additional effectiveness monitoring sites along sensitive stream channels are needed.

#### 3) What practices need to be changed based on monitoring results?

Improved administration and inspections of existing range improvements to ensure that required maintenance is completed.

Improved communication between fish biologists, range specialists, and permittees concerning effective grazing practices and management of riparian habitat for federally listed fish.

# 4) What is the current condition and trend of the resource when compared to the desired condition?

From visual assessments and implementation monitoring, riparian areas generally appear to be improving or maintaining conditions within active allotments. There remains isolated areas where grazing is affecting specific riparian attributes. Long-term effectiveness monitoring is needed to validate these assessments.

Upland (non-forested) vegetation is generally in stable condition. However, many low elevation grasslands have a significant component of annual grasses or exotic forbs. Little change is expected in the condition of non-forest vegetation over the next five years.

### SENSITIVE PLANTS

#### 1) What did we accomplish?

Forest personnel continued to survey Sensitive plants in high probability habitats. Approximately 2,000 acres were surveyed in 2001. Surveys were conducted within planned project areas.

New occurrences of, broad-fruit mariposa, Cluster lady-slipper, and Puzzling halimolobos were found and documented.

Monitoring continued on Puzzling halimolobos and Cluster lady-slipper.

The Forest contributed to a pollination research project and long term monitoring on Cluster lady-slipper lead by the Pacific Northwest Research Station.

Biological Assessments (BA) and Biological Evaluations (BE) continue to be completed for proposed projects.

Rare plants are being integrated into landscape and planning area assessments.

#### 2) What outputs and/or work was planned that did not get accomplished?

Monitoring data over the past few years has not been summarized.

General inventory of suitable habitat outside of project areas continues to be a low priority action.

#### 3) What practices need to be changed based on monitoring results?

Rare plants need to be more integrated into project prescriptions and design. Many projects could be designed to improve habitat structure for sensitive plants along with accomplishing other vegetation objectives.

# 4) What is the current condition and trend of the resource when compared to the desired condition?

It appears at this time that the known populations of our sensitive plants are secure, and there is a low probability of a loss of population viability over the short-term. Monitoring suggests that there is significant yearly variation in population levels. This variation appears to be a common trait among herbaceous plants.

### TIMBER AND SILVICULTURE

#### 1) What did we accomplish?

One hundred twenty two acres were precommercially thinned.

Planted 1,119 acres.

Harvested 1,976 acres or 18.9 million board feet\*.

Sold 1.1 MMBF of non-chargeable (not part of ASQ) component such as firewood and post and pole material.

Sold 9.5 MMBF of regular (part of ASQ) component. This volume sold was volume added to active timber sale contracts.

#### 2) What outputs and/or work was planned that did not get accomplished?

Timber sale offering fell short of target by 10.5 MMBF.

#### 3) What practices need to be changed based on monitoring results?

Vegetation management acres need to be increased if the Forest Plan objectives are to be met.

# 4) What is the current condition and trend of the resource when compared to the desired condition?

Higher than historical stocking is contributing to increased insect and disease incidence, as well as contributing to potentially higher fire intensities. The trend needs to change to lower density and create more shade intolerant seral species stands.

\*These timber volumes can be converted to CCF measure by multiplying by 1.78, the average forest conversion factor.

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**NEZ PERCE NATIONAL FOREST** 

# 14TH ANNUAL MONITORING AND EVALUATION REPORT

FISCAL YEAR 2001

Information requests or comments about the Nez Perce National Forest's Land and Resource Management Plan and/or Annual Monitoring and Evaluation Report can be directed to one of the following offices:

#### Salmon River Ranger District

Slate Creek Ranger Station HC01, Box 70 White Bird, ID 83554 Phone: (208) 839-2211 TTY: (208) 839-2328 FAX: (208) 839-2730

#### CLEARWATER

RANGER DISTRICT Route 2, Box 475 Grangeville, ID 83530 Phone: (208) 983-1963 TTY: (208) 983-0696 FAX: (208) 983-4056

#### Moose Creek Ranger District

Fenn Ranger Station HC 75, Box 91 Kooskia, ID 83539 Phone: (208) 926-4258 TTY: (208) 926-7725 FAX: (208) 926-7119

#### Red River Ranger District

Elk City Ranger Station Elk City, ID 83525 Phone: (208) 842-2245 TTY: (208) 842-2233 FAX: (208) 842-2250

Nez Perce National Forest Headquarters Office Route 2, Box 475 Grangeville, ID 83530 Phone: (208) 983-1950 TTY: (208) 983-2280 FAX: (208) 983-4099

# INTRODUCTION

On October 8, 1987, the Regional Forester, Northern Region, USDA Forest Service, approved the Nez Perce National Forest Land and Resource Management Plan (Forest Plan). At that time a commitment was made to monitor and evaluate how well the Plan was being implemented. Monitoring and evaluation comprise the management control system, and the results of monitoring and evaluation provide the line officer and the public with information on the progress and results of implementing the Forest Plan.

A commitment was also made to consider modifications to the Forest Plan using amendments based on the monitoring and evaluation findings. Monitoring and evaluation each have a distinctly different purpose and scope.

**Monitoring** is the act of gathering information/data and observing the results of management activities to provide a basis for periodic evaluation of the Forest Plan. There are three types of monitoring:

**Implementation Monitoring** (sometimes called compliance monitoring) determines whether management actions are implemented as specified in the NEPA decision. Fore example, making sure that a specific required mitigation requirement is implemented. The question being asked is: "Did we do what we said we were going to do?" In this report, implementation monitoring is the type of monitoring assumed, unless otherwise specified.

**Effectiveness Monitoring** often occurs over a period of years and determines whether the actions are effective in meeting management direction and objectives. [For example, determining whether a standard for retaining a certain amount of wood debris on a site is effective in maintaining soil productivity and reducing erosion. The question being asked in this type of monitoring is: "Did the management practice do what we wanted it to do?"]

**Validation Monitoring**, which often occurs via research projects, determines if the assumptions underlying key elements of planning and analysis (including computer models) are correct. The question being asked here is: "Are the assumptions that are being used to make resource predictions and decisions correct?"

**Evaluation** is the analysis and interpretation of monitoring results. Evaluation assists in the review of the conditions on land covered by the Forest Plan, as required at least every 5 years by the National Forest Management Act Regulations. Actions resulting from evaluation are reported in the **Plan Amendments and Action Items** sections of this report (Appendix). Evaluating the results of implementation monitoring can lead to immediate changes in the operation of a project, whereas evaluating the effectiveness or validation monitoring can be a basis for changes in future planning or management.

**Monitoring and evaluation** focus on those facets of land and resource management that could most critically affect Forest Plan implementation. Monitoring elements include:

- Items on which implementation may have a potentially significant effect;
- Items where achievement of a relevant goal or objective is going to be difficult;
- Item where projected effects may or may not occur as predicted; and

• Items where accomplishment of an objective or meeting of a standard determines the ability to achieve another goal or objective.

Management activities were monitored and evaluated as outlined in the Monitoring Requirements section of the Forest Plan, (pages 6 and 7, Table V-1, and Appendix O). This was done to determine how well objectives were met and how closely management standards were applied. Informal and formal field reviews were also conducted on a variety of projects during fiscal year 2001. These are documented in various ways, including daily diaries, file notes, and letters. These reviews are often conducted as routine inspections of timber sales, road contracts, mining operations, or while planning or implementing other projects. A summary of the key field reviews can be seen in **Section D – Other Monitoring**.

This report summarizes results of Forest Plan monitoring and evaluation conducted from October 1, 2000, through September 30, 2001. In some instances it is difficult to determine how well the Forest Plan objectives, outputs, and standards are being met. For some items data is insufficient to evaluate trends. We are continuing to develop methodologies for data acquisition and interpretation useful for evaluation.

This report is organized into six main sections, plus an appendix:

#### • Monitoring and Evaluation Results and Trends

This section compares planned outputs and services with the actual accomplishments and discusses budget and expenditure history and future projections. It also includes a detailed summary of monitoring findings for each of the required Forest Plan Monitoring Elements, subdivided by resource emphasis, i.e. wildlife, timber, recreation, etc.

- Research Needs
- Summary of Forest Plan Amendments, as of September 30, 2001.
- List of Preparers
- Forest Supervisor Approval
- Appendix
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# MONITORING AND EVALUATION RESULTS AND TRENDS

# PART A

# WERE OUTPUTS AND SERVICES PROVIDED AS PREDICTED?

Table 1 compares the levels of activities and outputs of projects in the Forest Plan with assigned targets for these schedules of work and with actual accomplishments for the activities and outputs for fiscal year 2001.

Project outputs and activities published in the Forest Plan on page II-9 and in Table II-1 are shown in the columns labeled **Forest Plan Projection**.

The targets represent the levels of work assigned to the Forest by the Regional Forester. These targets have been adjusted from projected levels in the Forest Plan to reflect actual funding levels.

Accomplishments show the amount of work actually completed in each fiscal year.

Even though the reporting period for some monitoring items may be two or more years, information from all monitoring items is reported annually on this table. This annual monitoring data will be evaluated within the body of the report at the end of the stated reporting period (anywhere from 1- to 5+ years).

MAR Code	Cost Org	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
EM-LRMP-M&E	MC	Forest Plan Monitoring/Evaluation	Reports	N/A	1.0	1.0
EM-LRMP-UW	MC	Forest Plan Revisions Underway	Plans	N/A	N/A	N/A
EM-AMEND	MC	LRMP Amendments Completed	Amendment s	N/A	N/A	N/A
EMRMP-COMP	MC	Forest Plan Revision Completed	Plans	N/A	N/A	N/A
EM-REG-EVAL	MC	State of the Region Evaluation	Reports	N/A	0.0	0.0

### <u>Table 1a</u> LAND MANAGEMENT PLANNING (NFPN)

# <u>Table 1b</u> ASSESSMENT

MAR Code	Cost Org	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
EM-AS-WA	MB	Landscape/ Watershed Scale Assessments	Assessments	N/A	3.0	3.0
EM-SUB-RVR-A	МВ	Eco – Sub-Region Scale Assessment	ASSESSMENT S	N/A	0.0	0.0

# <u>Table 1c</u>

### INVENTORY (NFIM)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
EM-RIVSS-INV	MA	Riverine Vly Sgmt Scale Inv.	Miles	N/A	47.0	46.0
EM-RIVSR-INV	MA	Rvrn Strm R/C Unit Scale Inv.	Miles	N/A	0	0.0
EM-LL-TY-INV	MA	Lacustrine Lk Type Scale Inv.	Acres	N/A	0	0.0
EM-LL-ZO-INV	MA	Lcstrn Lk Zone/Site Scale Inv.	Acres	N/A	0	0
EM-ECOREG-AS	MB	Ecrgn Sci-D/D/P Assessment	Assessment	N/A	0	0
EM-AQRV-1	MA	Air Quality Related Value Inv	Acres	N/A	0	0
EM-VEG-SBS	MA	Veg Inv for Eco-subrgn Scale	Acres	N/A	0283,000	300,000
EM-VEG-LPS	MA	Veg Inv for Lndscp/Wtrshd Scl	Acres	N/A	0	0
EM-TF-SBS	MA	Terrestrial Fauna Inv for Eco-subrgn	Acres	N/A	0	
EM-TF-LPS	MA	Terrestial Fauna Inv for Landscape	Acres	N/A	0	0.0
EM-AQBI-R	MA	Aquatic Biota Inv for Riverine Valley/Stream Reach Scale	Miles	N/A	82.0	83.0
EM-AQBI-L	MA	Aquatic Biota Inv for Lake Type or Lake Zone Scale	Acres	N/A	41.0	40.0
EM-TEUI-SBRG	MA	Eco-subrgn (sct/sbsct) Scale	Acres	N/A	0	0
EM-TEUI-LND	MA	Landscape Scale Inventory	Acres	N/A	0	700,000
EM-TEUI-LUS	MA	Land Unit Scale Inventory	Acres	N/A	0	0
EM-HR-I	MA	Heritage Resource Inventories	Acres	N/A	.0.	0.0
		MONITORING	G (NFIM)			
EM-SRM-M	MC	LRMP Monitoring of Soil Res.	Acres	N/A	0	0.00
EM-WRM-M	MC	LRMP Monitoring of Water Res.	Sites	N/A	0	8.0
EM-AQRV-M	MC	Air Quality Related Value Monit	Acres	N/A	0	1.0
EM-RU-M	MC	LRMP Monitoring of Rec Use	Survey Days	N/A	19.0	33.0

# Table 1d RECREATION MANAGEMENT (NFRW)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
RM-SU-ADMIN	OP	Rec Spcl Use Permits Total	Permits	N/A	168.0	72.0
RM-REC-USE-T	OP	Recreation Use Total	M Visits	N/A	0	0.0

# Table 1e WILDERNESS MANAGEMENT (NFRW)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
RM-WLDPSC	OP	Wilderness meeting FLRMP Standards for Physical/Social Conditions	ACRES	N/A	0	0.0
RM-WLD-EC	OP	Annual Education Contacts	Contacts	N/A	0.0	0.0
RM-WLD-RP	MT	Wilderness Resource Protection	Acres	N/A	0	0
		HERITAGE MANAGEME	NT (NFRW)			
RM-HERT-EVAL	OP	Heritage Sites Evaluated	Sites	N/A	8.0	10.0
RM-HERT-INTP	OP	Heritage Sites Interpreted	Sites	N/A	1.0	0.0
RM-HERT-P&P	OP	Heritage Sites Preserve/Protect	Sites	N/A	12.0	14.0
RM-HERT-INV	OP	Heritage Acres Inventoried	Acres	N/A	3.0	8512

# <u>Table 1f</u>

# WILDLIFE HABITAT MANAGEMENT (NFWF)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
WL-STRUCTURE	<5000 IN >=5000RP	Wildlife Structures	Structures	N/A	0	0
WL-THAB-RES	<5000 IN>= 5000 RP/IN	Terrestrial Wild. Habitat Restored/Enhanced	Acres	64.0	1250	1950

# Table 1g FISH HABITAT MANAGEMENT (NFWF)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
	-	Inlan	ID		-	
WL-IF-STR-RE	<5000 IN>= 5000 RP/IN	Inland Fish Stream Restored/Enhanced	Miles	N/A	9.0	9.0
WL-IF-LAK-RE	<5000 IN>= 5000 RP/IN	Inland Fish Lake Restored/Enhanced	Acres	N/A	2.0	2.0
		ANADRO	NOUS			
WL-AF-STE-RE	<5000 IN>= 5000 RP/IN	Anadromous Fish Stream Restored/Enhanced	Miles	N/A	26.0	25.0
WL-AF-LAK-RE	<5000 IN>= 5000 RP/IN	Anadromous Fish Lake Restored/Enhanced	Acres	N/A	0	0

# Table 1h TE&S MANAGEMENT (NFWF)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
WL-TES-STRUC	<5000 IN >=5000 RP	TES Structures	Structures	N/A	0	0
WL-TE-AQ-SRE	<5000 IN>= 5000 RP/IN	TE&S Aquatic Stream Habitat Restored/Enhanced	Miles	N/A	3.0	3.0
WL-TE-AQ-LRE	<5000 IN>= 5000 RP/IN	TE&S Aquatic Lake Habitat Restored/Enhanced	Acres	N/A	2.0	2.0
WL-TES-HAB	LT	TES habitat Restored/Enhanced	Acres	64	464	464
WL-BIO-A&E	MB	Bio Assess/Evaluation	Tasks	N/A	0	0.0
WL-CON-TE	OP	T&E Species Conserv Actions Accmp	Species	N/A	1.0	1.0
WL-CON-S	OP	Sensitive Species Conserv Actions Accmp	Species	N/A	1.0	1.0

# <u>Table 1i</u> GRAZING MANAGEMENT (NFRG)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
RG-STRUC-IMP	<5000 IN >=5000 RP	Range Structural Improvements	Structures	N/A	9.0	9.0
RG-GZ-ADM-ST	OP	Grazing Allotments Administered to Standard	Permits	N/A	22.0	22.0
RG-GZ-ADM-T	OP	Grazing Allotments Administered – Total	Allotments	N/A	0	0
RG-GZ-NEPA	OP	Grazing Allotments Analyzed/Implemented	Allotments	N/A	4.0	4.0
RG-GZ-SH-GTS	OP	Grazing – Sheep & Goats	Hd Months	N/A	0	
RG-GZ-CA-HOR	OP	Grazing – Cattle & Horses	Hd Months	N/A	0	

# Table 1j RANGELAND VEGETATION MANAGEMENT (NFVW)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
RG-NOX-WD-TR	LT	Noxious Weed Treatment	Acres	500	1700.0	1
RG-N-STR-IMP	LT	Range Non-Structure Imp.	Acres	0	0	0
RG-MON-EVAL	OP	Rangeland Monitored/Evaluated	Acres	N/A	4000.0	4000.0
RG-RLRP-NEPA	OP	Range Restored/Protected NEPA Decisions	Acres	N/A	15000.0	15000.0

### <u>Table 1k</u>

TIMBER SALES MANAGEMENT (NFTM)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
FM-FUELS-BD	PM	Fuels Treatment – BD	Acres	N/A	1300.0	712.0
FM-VOL-OFF-B	EC	Volume Offered, New	MBF	N/A	6800	5692
FB-VOL-SSS-B	EC	Volume Offered, SSF	MBF	N/A	13700	3893
FM-VOL-OFF-N	EC	Volume Offered, New	CCF	N/A	12100	10745
FM-VOL-OFF-S	EC	Volume Offered, SSF	CCF	N/A	24369	8260
FM-VOL-SLD-B	EC	Volume Sold	MBF	N/A	20500	9585
FM-VOL-SOLD	EC	Volume Sold	CCF	N/A	36469	19005
FM-VOL-HV-TB	EF, EG, EH	Volume Harvested – Total	MBF	N/A	0	18928
FM-VOL-HAR-T	EF, EG, EH	Volume Harvested – Total	CCF	N/A	0	33692

# Table 11 FOREST VEGETATION MANAGEMENT (NFVW)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
FM-REF-APPR	EK	Reforestation	Acres	900	828	1060
FM-REF/KV	EK	Reforestation-KV	Acres	4657	186	341
FM-TSI-APPR	EL	Timber Stand Improvement	Acres	3600	182	73
FM-TSI-KV	EL	Timber Stand Improvement - KV	Acres	1200	73	0

# Table 1m SOIL, WATER, AIR OPERATIONS (NFVW)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
SW-PSD-APP	OP	PSD Permit Applications Reviewed	Applications	NA	0	0

### <u>Table 1n</u>

### SOIL, WATER, AIR IMPROVEMENTS (NFVW)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
SW-RES-IMP	<5000 IN >=5000 RP	Soil & Water Resource Imp.	Acres	50	10.0	45.0
SW-WS-CL-I	OP	Class I Watersheds	Watersheds	N/A	0	0.00
SW-WS-CL-II	OP	Class II Watersheds	Watersheds	N/A	0	0.0
SW-WS-CL-III	OP	Class III Watersheds	Watersheds	N/A	0	0.0

# Table 10 NON-ENERGY RESOURCES (NFMG)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
MG-N-BNE-OP	GL/GR	N-Bond N-Energy Ops	Operations	N/A	0.0.0	50.0.
MG-BNE-OP-PR	GL/GR	Bond N-energy Ops	Operations	N/A	0.0	1.0
MG-T-BNE-OP	GL/GR	Total Bond N-Energy Ops	Operations	N/A	0.0	26.0
MG-BNE-OP-AD	GL/GR	Bond N-energy Op Adm To Stnd	Operations	N/A	29.0	29.0
MG-NE-AC-PR	GE	N-Energy Acres Processed	Acres	N/A	0	0
MG-ABAN-SI-R	<5000 IN >=5000 RP	Abandoned Sites Reclaimed	Sites	N/A	0	0
MG-GEO-MA-AD	OP	Geologic Mgmt Areas Admin.	Areas	N/A	0	0
MG-GEO-PER	GL	Geologic Permits/Reports Comp.	Reports	N/A	0	0
MG-ENG-OP-AD	GL/GR	Energy Operations Adm. – Std.	Operations	N/A	0	0

# Table 1p REAL ESTATE MANAGEMENT (NFLM)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
LN-LND-CLASS	OP	Landownership Admin	Cases	N/A	2.0	0.0
LM-SU-APPL	JA	Gen Special Use Applications Processed	Permits	N/A	15	0.0
LM-SUP-STD	OP	Auth Administered to Standard	Permits	N/A	30	104.0
LM-SUP-TOT	OP	Auth Administered - Total	Permits	N/A	0	135.0

# Table 1q ACQUISITION OF LANDS (LALW)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
LA-OWNER-ADJ	IN	Ownership Adjustment	Acres	N/A	0.0	0
LA-EXCH-FEE	JB	Land Exchange – Fee	Acres	0	0	0
LA-EXCH-PART	JB	Land Exchange – P/Interest	Acres	N/A	0	0
LA-ROW-ACQ	IN	Rights-of-Way Acquired	Cases	N/A	0	0

# Table 1r LAND LINE LOCATION (NFLM)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
LM-LL-NEW	IN	Land Line Location	Miles	N/A	6.0	6.0
LM-LL-MAINT	MT	Land Line Maintenance	Miles	N/A	5.0	30.0
LM-S-BOUNDRY	IN	Special Area Boundary Location	Miles	N/A	0	0

### <u>Table 1s</u>

### ROAD MAINTENANCE (CMRD)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
RD-DECOMM	OM	Roads decommissioned	Miles	N/A	26	28

# Table 1t LAW ENFORCEMENT OPERATIONS (NFLE)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
LE-INCIDENTS	LD	Incidents	Incidents	N/A	0	0
LE-COOP-AGRE	LB	Cooperative Agreements	Agreements/1	N/A	0	0

# <u>Table 1u</u>

### FOREST ROAD RE/CONSTRUCTION (CMRD)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
CR-RD-RECONS	RP	Road Reconstruction	Miles	0-26	3.2	13.1

### <u>Table 1v</u>

### FOREST SERVICE FIRE PROTECTION (WFPR/WFHF)

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
FP-FFPC	PJ	FF Protection Capability	Chains/hour	N/A	137.0	154.0
FP-FUELS-APP	PM, PN	Fuels Treatment	Acres	6265	4860.0	13297.0

# <u>Table 1w</u> HUMAN RESOURCES

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
HR-YCC-PART		YCC Participation	Enrollee Weeks	N/A	0	0
HR-SCSEP		SCS Participation	Enrollee Hours	N/A	0	0
HR-VOLN-NF		NFS Program Volunteers	Enrollee Years	N/A	0	0
HR-HOSTED-PR		Hosted Program/Other HRT	Enrollee Years	N/A	0	0

### <u>Table 1x</u>

### TRAILS MAINTENANCE AND CONSTRUCTION

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
TR-MAINTN	MT	Trails maintained	Miles	N/A	952	1277
RM-TRAIL-SYS	MT	System trails	Miles	N/A	N/A	1479
RM-WLDTR-SYS	MT	Wilderness trails	Miles	N/A	N/A	1427

# Table 1y FOREST TRAIL CONSTRUCTION (CMTL)

MAR	Work	Definition	Unit of	Forest Plan	FY 01	FY 01
Code	Activity		Measure	Projection	Target	Accomplishment
CR-TR-CNST-R	<5000 IN >=5000 RP	Trail Construction/Reconstruction	Miles	20	26.0	9.0

# Table 1z FACILITY RECONSTRUCTION

MAR Code	Work Activity	Definition	Unit of Measure	Forest Plan Projection	FY 01 Target	FY 01 Accomplishment
RM-PAOTS-TOT	OP	Seasonal Capacity Available – Total	PAOTS	N/A	683,000	678,690
FC-FAC-CI	RP	Capital Improvements Completed	Facilities	N/A	N/A	0.0

# PART B

# ARE THE DOLLARS AND WORKFORCE COSTS OF THE PLAN IMPLEMENTED AS EXPECTED?

Table 2 shows the amount of funds allocated to and expended by the Forest for the last three fiscal years (1999-2001).

Table 3, **Projected Forest Funding Level**, displays the actual FY 2001 –projected FY 2002 Forest budget by resource function. Dollars have been adjusted to constant 2001 values for Tables 2 and 3.

Various types of funding are mentioned throughout this report. Much of the Forest's funding is obtained directly through congressional appropriations. Additional funding comes from trust funds that include deposits made to the Forest Service by timber purchasers and range permittees to cover the cost of resource protection. Other funds are derived through partnerships with organizations and private parties on a cost share or matching fund basis. The following sections describe these different funding types.

### Appropriated Funds for National Forest System Lands

These are dollars appropriated by Congress to provide for the protection, management, and utilization of national forest lands.

### Range Betterment Funds

A portion of grazing fee receipts finances the range betterment program on national forest lands. Fifty percent of grazing fee receipts are returned to the Forest to fund installation of structural and nonstructural range improvements such as seeding, fence construction, weed control, water development, and fish and wildlife habitat enhancement. It is regional policy that the range permittee cooperates by splitting the cost of labor and supplies. Often the permittee cooperates in these activities by supplying the labor needed to implement and maintain the improvements.

### Permanent and Trust Funds

### Brush Disposal (BD)

After timber harvest operations, it is often necessary to dispose of brush and logging slash to protect and maintain national forest resources. Timber sale contracts require that the timber purchaser complete this work when economical or expedient, or make a deposit to cover the cost when it is more practical for the Forest Service to complete the brush disposal work.

### Timber Salvage Sales

Timber Salvage Sale funds are used for the design, engineering, and supervision of road construction for salvage sales, for sale preparation, and for administration of salvage timber harvest. These funds are used to salvage insect invested, dead, damaged, or down timber, and to remove associated trees for stand improvement. Part of the receipts from timber salvage sales are deposited in this account and used to prepare and administer future salvage sales.

### Cooperative Work, Knutson-Vandenberg (KV) Funds

These funds are deposited by timber purchasers and used primarily for resource activities that improve the future productivity of the renewable resources on timber sales (i.e. reforestation, timber stand improvement, etc.).

### Cooperative Work, Other (CWFS-Other) Funds

CWFS – Other funds are derived from deposits received from cooperators for protecting and improving resources as authorized by trust agreements. These deposits are used for the construction, reconstruction, and maintenance of roads, trails, and other improvements, and for timber scaling services, fire protection, and other resource purposes. Cooperative road maintenance deposits are made by commercial users of the forest road system in lieu of actually performing their commensurate share of road maintenance. The Forest Service uses these deposits in conjunction with the congressional appropriated funds to provide maintenance for system roads.

### Challenge Cost Share Dollars

Challenge cost share agreements are federal funds matched by various states, and private nonprofit organizations to jointly develop, plan, and implement projects to enhance specific resource improvement activities. These funds are currently permitted for use in recreation, wildlife, and fish cost-share programs.

Note: Dollars have been adjusted to constant 2001 values for Tables 2 and 3.

# <u>Table 2</u>

### COMPARISON OF PROJECTED FUNDING LEVELS, ALLOCATIONS, AND EXPENDITURES

Funding Description	Fiscal y	year 1999	Fiscal y	vear 2000	Fiscal year 2001	
Year of \$\$	Allocation FY 1999	Expenditures FY 1999	Allocation FY 2000	Expenditures FY 2000	Allocation FY 2001	Expenditures FY 2001
General Administration	\$ 1108	\$ 1166	\$ 725	\$ 720	\$ 0	\$ 0
Recreation, Heritage &						
Wilderness	\$ 1856	\$ 1792	\$ 1741	\$ 1743	\$ 944	\$ 947
Title IV Nat'l Fire Plan	0	0	0	0	32	38
Fisheries and Wildlife	\$ 1113	\$ 1118	\$ 1094	\$ 953	\$ 1358	\$ 1237
Grazing Management	\$ 484	\$ 508	\$ 381	\$ 465	\$ 237	\$ 184
Vegetation & Watershed	\$ 898	\$ 843	\$ 1026	\$ 1008	\$ 1599	\$ 1664
Title IV Nat'l Fire Plan	0	0	0	0	630	364
Reforestation Trust	0	0	0	0	0	\$ 0
Minerals	\$ 340	\$ 344	\$ 258	\$ 315	\$ 324	\$ 349
Timber						
-Timber Management	\$ 928	\$ 959	\$ 513	\$ 451	\$ 339	\$ 310
-KV Reforest/ TSI/Other	1776	1043	1333	819	910	672
-CWFS Other-Trust Fund	182	131	102	138	100	84
-Timber Salv. Sales	2186	1815	2144	1635	1814	1485
Protection						
<ul> <li>Fire Protection &amp; Fuels</li> </ul>	\$3710	\$4209	\$ 3668	\$ 3553	\$5414	\$ 5210
<ul> <li>Law Enforcement</li> </ul>	92	82	100	123	60	53
- Brush Disposal	229	152	225	206	281	194
Title IV Nat'l Fire Plan	0	0	0	0	621	358
Lands Mgmt & Acqu.	\$ 206	\$ 208	\$ 150	\$ 143	\$ 299	\$297
-Special Uses/Land Exc &						
Acq/Landline Location	89	98	61	56	25	24
Title IV Nat'l Fire Plan	0	0	0	0	25	26
Capital Imprvmt & Mtce.						
-Facility Cap. Imprvmt &						
Maintenance	\$ 316	\$ 377	\$ 357	\$ 302	\$715	\$ 572
-Roads Cap. Imprvmt &						
Maintenance	1078	1367	1040	1185	1131	1125
-Trail Cap. Imprvmnt &						0.10
Maintenance	156	357	494	377	1314	916
-Deferred Maintenance	0	0	0	0	252	251
Roads & Trails for States	83	143	113	30	100	101
litie IV Nat'l Fire Plan	U	0	0	0	55	96
Intrastructure Improve.	0	0	0	0	0	0
& maintenance	0	0	U	U	0	U
Ecosystem Management	\$ 743	\$ 652	\$ 809	\$ 606	\$ 780	\$ 689
Totals	\$17,573	\$17,364	\$16,334	\$14,828	\$19,359	\$17,246

This table was converted to current 2001 funding categories. Previous fund groups were converted to match the current allotment categories (i.e. NVRW, NFVW, NFWF, NFLM, CMFC, CMRD and CMTL). A retroactive correction was made to prior years' funds to accommodate the new groupings. Table totals now include some funds not previously reported (i.e. TRTR, NFFA) and others were moved between groupings. Because of this, some individual amounts from this table may not agree with prior year individual and total amounts.

# <u>Table 3</u>

### FOREST FUNDING LEVEL FOR FY 2001 AND TENTATIVE FY 2002

FY 2001 Funds	FY 2002 Funds	Funding Description	FY 2001	FY 2002
NFRW	NFRW	Recreation, Heritage, and Wilderness	\$ 944	\$ 781
NFN3	NFN3	The IV National Fire Plan	32	83
NFWF	NFWF	Fisheries and Wildlife	\$ 1,358	\$ 1,021
NFRG	NFRG	Grazing Management	\$ 237	\$ 195
NFVW	NFVW	Vegetation and Watershed	\$ 1,599	\$ 518
NFN3	NFN3	Title IV National Fire Plan	630	686
	RTRT	Reforestation Trust		1,332
NFMG		Minerals	\$ 324	\$ 286
NFTM CWKV CWFS SSSS		TIMBER         -       Timber Management         -       KV Reforest/TSI/Other         -       CWFS Other-Trust Fund         -       Timber Salvage Sales	\$ 339 910 100 1,814	\$835 755 90 1,763
WFPR, WFHF NFLE BDBD WFW2		PROTECTION         -       Fire Protection & Fuels         -       Law Enforcement         -       Brush Disposal         -       Title IV Nat'I Fire Plan	\$ 5,414 60 281 621	\$ 4,676 70 295 258
NFLM, LALW, LAAQ NFNE		LANDS MGMT & ACQUISITION - Special Uses/Land Exchange & Acquisition/Landline Location - Title IV Nat'I Fire Plan	\$ 214 25	\$ 261 17
CMFC		CAPITAL IMPROVEMENTS & <u>MAINTENANCE</u> - Facility Capital Improvement & Maintenance Paede Capital Improvement &	\$ 715	\$ 391
CMTL		<ul> <li>Roads Capital Improvement &amp; Maintenance</li> <li>Trail Capital Improvement &amp; Maintenance</li> </ul>	1,131	1,128
рмрм		- Deferred Maintenance	252	0
TRTR		ROADS AND TRAILS FOR STATES	100	44
NFN3		TITLE IV NAT'L FIRE PLAN	55	0
		INFRASTRUCTURE IMPROVEMENTS		
CMII		& MAINTENANCE	0	452
NFIM, NFPN	NFIM, NFPN	Ecosystem Management	\$ 780	\$ 556
		Totals	\$19,359	\$17,916

FY 2001 changes to this table include:

- General Administration (NFGA) no longer identified as a separate funding item.
- Range Vegetation, Forest Vegetation, and Soil and Water are now combined into a single category Vegetation and Watershed.
- Former category of **Roads and Facilities** now identifies funding items as **Capital Improvements and Maintenance**.
- Addition of **National Fire Plan** funds identified by programs.
- FY 2001 **Deferred Maintenance** funding (DMDM) replaced by **Capital Infrastructure Improvements** (CMII) for 2002.

# Part C Forest Plan Monitoring Requirements

Monitoring and evaluation results are summarized and discussed on the following pages. Each monitoring item lists:

- What is being measured;
- Frequency of measurement;
- Reporting period;
- Monitoring results; and
- Evaluation of monitoring results.

The items are arranged by resource and follow the requirements in the Nez Perce Forest Plan (Table V-1).

\*\*\*\*\*\*\*\*\*\*

# WILDLIFE

# Item 1c: Big-Game Habitat Carrying Capacity

**Frequency of Measurement:** Annually (October 1, 2000 – September 30, 2001)

### **Reporting Period:** 5 years

**Variability that would initiate further evaluation:** Significant trend deviations (evaluated at 5-year intervals) from planned or expected forage-generating activities or events (timber harvest, prescribed fire, and wildfire).

\*\*\*

### Forage Production:

### Monitoring Results:

Timber harvest (i.e., clear-cut, seed tree, and shelter wood), prescribed fire, and wildfire acreages are used as forage production indices. Forage production for elk and deer in the coniferous forests of north central Idaho is related primarily to shrub, grass, and forb stages of forest plant succession. Creating openings in forest stands through timber harvest and fire typically increases elk and deer forage. The Forest Plan projected an annual average of 4,585 acres of regeneration timber harvest and 5,000 acres of prescribed fire for elk and deer winter range. The Forest Plan also estimated wildfire acreage (based on a running 10-year average) to be approximately 4,700 acres per year.

Projected acreages for each variable identified in the Forest Plan, and their FY 2001 target and accomplishments, are depicted on the following tables.

Fiscal	Acres
Year	Harvested
Forest	4 505
Plan	4,585
1988	2,911
1989	2,544
1990	2,521
1991	2,931
1992	2,616
1993	2,304
1994	2,554
1995	1,454
1996	2,419
1997	489
1998	721
1999	495
2000	292
2001	514

### Big Game Forage Produced by Timber Harvest

### Evaluation of Monitoring Results:

Since Forest Plan implementation, timber harvest that has increased big game forage has averaged approximately 1,865 acres per year (41 percent of the Forest Plan projection). Though timber harvest has fallen short of planned acreages, wildfires have helped to compensate for the shortfall.

### Big Game Forage Produced by Wildlife and Wildland Fire Used for Benefits

Fiscal	Acres
Year	Burned
Forest Plan	4,683
1988	105,943
1989	8,888
1990	643
1991	2,207
1992	44,966
1993	4,700
1994	9,118
1995	26
1996	40,132
1997	29
1998	233
1999	1,278
2000	33,097
2001	18,160

### Summer Elk Habitat:

The Forest Plan identified approximately 1,887,000 acres of elk summer range on the Nez Perce National Forest. Of this amount, approximately 866,000 acres (46 percent) of elk summer range are within the Forest's three designated wildernesses. The Forest Plan designated elk summer range effectiveness objectives at 25 percent on approximately 207,132 acres; 50 percent on approximately 463,372 acres; 75 percent on approximately 274,033 acres; and 100 percent on approximately 942,258 acres. The "Guidelines for Evaluating and Managing Elk Habitat in Northern Idaho" are used to determine if land management activities meet the elk summer habitat effectiveness objectives in the Forest Plan.

### Monitoring Results:

Compliance with summer objectives for projects implemented in FY 2001 has been excellent.

### Evaluation of Monitoring Results:

Current compliance with Forest Plan elk objectives is excellent, however a few areas remain below objective for a variety of reasons. Assessment of forest-wide elk summer range conditions continues to indicate:

- 1. Elk habitat effectiveness objectives are being met or exceeded on 78 percent of the Forest's elk summer range; and
- 2. Needed adjustments to meet Forest Plan elk objectives in some cases may conflict with motorized vehicle access objectives more than originally anticipated.

The Forest completed a Forest Plan minor amendment (Forest Plan Amendment #23) process to correct original Forest Plan analysis unit errors and resolve many incompatibilities created by original objective assignments.

### Moose Winter Range (MA 21):

Grand fir and pacific yew canopy cover and yew browse are important components of moose winter habitat. Timber harvest on moose winter range is limited by the Forest Plan to 5 percent of MA 21 per decade.

### Monitoring Results:

In FY 2001, 36 acres of MA 21 experienced limited harvest, but due to wholesale changes in forest management and harvest type philosophies in recent years, this level of impact is no longer considered damaging to moose habitats. The acres harvested in FY 2001 were well below the 5 percent per decade limit and well within Forest Plan standards. The dramatic reduction in clear-cut/burn prescriptions used in recent years in timber management has virtually eliminated risks to grand fir/Pacific yew moose habitats.

### Evaluation of Monitoring Results:

Forest Plan direction to limit timber harvest to 5 percent per decade has been followed for projects initiated under the Forest Plan. Lack of funding, major changes in harvest strategies, reduced priority, and inadequate staff time has precluded the need to gather annual management data or conduct further research to better describe preferred moose winter range characteristics. Reasons related for limiting the clear-cut/burn harvest acres deal with Pacific yew's susceptibility to fire. Vegetation treatment strategies used currently are not considered nearly as harmful to sustainability of winter moose habitats.

### \*\*\*\*\*

# Item 1d: Non-Game Habitat

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

Reporting Period: 5 years

**Variability that would initiate further evaluation:** Significant deviation from Forest standards on a project-by-project basis triggers further evaluation.

\*\*\*

### Old Growth (MA 20):

The Forest Plan states that no timber harvest will be considered in designated old growth forest until decade 10 and/or in replacement stands until decade 16. Recognition of risks from stand-replacing fires in ponderosa pine habitat types have led to proposals to partially thin from below in some ponderosa pine old growth stands as needed. Twelve acres were reported harvested within MA 20 sites in FY 2001 (per the database), but initial review suggests that the database was in error, likely due to lack of analysis/old growth validation updates. Site-specific Forest Plan Amendments may allow selective harvest in low elevation, dry site forest types as needed to protect and restore large ponderosa pine and help prevent losses of related old growth habitats due to high-intensity fire risks. See Forest Plan Amendment 26.

The Berg Salvage Sale treated old growth stands that were monitored in 1999. Results of preand post-harvest sampling of remaining trees per acre in the old growth are shown below.

### Berg Old Growth Monitoring Results:

The main objective of treating the old growth stands in the Berg Timber Sale area was to reduce the stand densities, especially the understory, and protect and enhance seral, ponderosa pine old growth communities. Overall, large trees of ponderosa pine and Douglas fir over 27 inches in diameter at breast height would remain, as well as snags.

As a result of the pre- and post-harvest monitoring, overall stand densities were reduced by 15 trees per acre. The goals of maintaining/retaining snags and the larger diameter ponderosa pine and Douglas-fir were met. However, the goal of reducing and/or eliminating the understory shade-tolerant species was not met, especially the grand fir and Douglas-fir in the less than 14 inches in diameter at breast height size classes. The following graph depicts by species and size class how the structure has changed between pre- and post-harvest treatments.



Post-harvest burning activities have not yet occurred. Once those activities are completed the old growth monitoring plots will be revisited. The outcome of monitoring this activity is to see how many trees are lost to fire (or not). The intent is to further reduce the understory trees.

### Monitoring Results:

During FY 2001, old growth conditions were inventoried and validated as part of the O'Hara Environmental Analysis at the Watershed Scale inventory. Database review of acres harvested in FY 2001 showed that no stands designated as old growth were harvested. The previously used practice of clearcutting and burning in late seral stands is no longer done. To help ensure long-term sustainability of old growth in some areas, thinning of fuel conditions is necessary and healthy. The monitoring results of the Berg Sale (above) illustrate the actual changes from harvest and thinning in old growth stands. Increased awareness of stand replacement fire risks in lower elevation ponderosa pine and dry Douglas fir habitat types is stimulating changes in how these dry conifer habitats are managed. As an example, the South Fork Clearwater River Landscape Assessment proposed interim recommendations (page 209) for better meeting old growth needs in this habitat.

### Evaluation of Monitoring Results:

Compliance with Forest Plan standards for retention and protection of old growth from harvest has been accomplished throughout Forest Plan implementation. Improved criteria for determining old-growth sites are being used. These new criteria have resulted in more accurate determinations of old growth forests and their conditions.

The effects of unnaturally overstocked stands and drought stress leading to stand replacing forest fires, especially where retention of old growth is desired, continues to be a concern in ponderosa pine and some drier Douglas fir cover types. The use of fire and/or some form of silvicultural thinning to remove understory trees that act as "ladder fuels" are being used more

frequently to help protect designated lower elevation old growth forests from unnatural fuel buildups and stand-replacing fires.

### Snag Habitats:

### Monitoring Results:

Maintaining adequate numbers and size classes of snags on some heavily managed sites throughout the managed landscape has been a challenge. Inventorying existing numbers of snags on a landscape scale is proving to be a similar challenge. Dramatic reductions in overall forest harvest levels and roading in recent years has begun to help reverse this trend and diminish these disparities relative to what would have occurred if large-scale clear cutting and burning had continued. Increased use of prescription fire is helping to create new snags and thin stands to help grow larger trees for future snags.

### **Threatened and Endangered Species Habitats:**

### Monitoring Results:

Management and protection of threatened, endangered, and sensitive (TES) wildlife and habitats are routinely evaluated in biological assessments/evaluations. In FY 2001, no instances of formal consultation were required for terrestrial species. Thirteen thousand (13,000) acres of terrestrial TES habitats were inventoried. Four hundred sixty-four (464) acres of TES habitat were improved.

**Gray Wolf:** Three individual wolf observation reports of five (5) total animals on or near the Forest were reported in FY 2001, including a pack of 3 reported 5 miles southeast of Elk City. Single animals were reported west of Tolo Lake (off the Forest) and on the Selway River trails. There is no evidence of livestock depredation reported on the Forest to date, as had occurred in Montana, central Idaho, or Yellowstone Park. As part of continuing wolf management for recovery, several wolves which conflicted with domestic livestock in central Idaho, were relocated into the Selway-Bitterroot Wilderness during FY 2001 by the Nez Perce Tribe Wolf Recovery Program. Most animals returned to their original locations of livestock conflict or other areas away from the release sites.

**Grizzly Bear:** No observations of grizzly bears were reported in FY 2001. To date no confirmation of permanent grizzly occupation exists on the Forest.

**Peregrine Falcon:** The peregrine falcon was delisted on August 25, 1999. Monitoring will continue through 2004. The Shingle nest exhibited no activity again in FY 2001. The Sheep Gulch nest was active in FY 2001, but it is unknown whether any young were successfully fledged.

**Bald Eagle:** The bald eagle was down-listed to threatened status in August 1995, by the U.S. Fish and Wildlife Service. Bald eagles have been monitored through the Forest's participation in the annual bald eagle mid-winter census. Transects and counts are shown below.

Survey Route	Salmon Ri Bird to Vin	ver: White egar Creek	South Fork Clearwater: Farrens Creek to Crooked River		Middle Fork Clearwater: Clear Creek to Selway		Grand Total
Age	Adult	Immature	Adult	Immature	Adult	Immature	
1984	1	0	3	1	9	0	14
1986	2	0	0	0	6	2	10
1987	1	0	1	0	5	2	9
1988	2	1	2	0	10	2	17
1989	2	0	0	0	4	3	9
1990	5	0	0	0	1	1	7
1991	3	0	1	1	4	4	13
1992	2	0	3	0	12	4	21
1993	10	5	0	0	7	1	23
1994	2	1	3	1	9	3	19
1995	6	0	3	6	15	3	33
1996	4	0	2	0	3	1	10
1997	3	0	3	0	5	1	12
1998	11	1	2	1	No data	No data	15
1999	3	0	3	0	5	1	12
2000	10	0	3	0	No data	No data	13
2001	10	0	3	0	No data	No data	13

### Evaluation of Monitoring Results:

The winter survey routes located on the Forest again yielded 13 adult birds and 0 immature birds. This was similar to recent years, though not as high as 1995 (33 birds). Bald eagles are considered stable or increasing in the northwestern U.S. in general.

### Forest Service Sensitive Animal and Plant Species Program:

### Monitoring Results:

Inventories of Neotropical migratory bird habitats in burned and unburned ponderosa pine and dry Douglas fir sites were done in FY 2001. Limited staffing precluded opportunities to monitor most other sensitive species except for post-fire and allotment monitoring described below.

### Post-Burn Monitoring:

Post-burn monitoring surveys in the 22,000 acre **Burnt Flats** fire area less than a year after the fire revealed a dozen separate sightings of black-backed woodpeckers. All black-back sightings occurred in severely burned and charred timber (ponderosa pine, Douglas fir, grand fir). Other woodpeckers observed using the overall area included: Northern 3-toed, Northern flicker, pileated, Lewis', hairy, downy, as well as white-headed woodpeckers.

**Elkhorn-Jersey** prescription fire monitoring revealed that some areas simply did not burn at all. A mosaic of burned and unburned areas throughout the planned burn area contributed to diversity. Individual small trees and occasional patches of mixed age live trees were killed in limited locations. Snag creation was relatively poor overall, but best on southern and southwestern aspects as expected. Benefits to ungulate range were evident but expected improvements in habitats for white-headed woodpecker, flammulated owl, and black-backed woodpecker were very limited. Given the cooler conditions under which this fire burned, multiple fire applications, or thinning and fire will likely be required to meet objectives for sensitive bird species.

**South Fork Clearwater River** burns resulted in multiple positive benefits for big game, their predators, and overall ungulate winter/transitional ranges. Creation of snags and reduction of tree density varied from fire to fire depending on relative temperature/humidity conditions present at each site. Multiple treatments including understory thinning may be required to yield significant benefits in ponderosa pine and dry Douglas fir cover types for flammulated owl and white-headed woodpecker habitats.

Results of Allyson Turner's (Boise State University) 3-year monitoring study of post-burn effects on neotropical migrant land-birds (reported at the April 12, 2001 Land-bird and Fire Effects Meeting), concluded the following:

- 1. Effects from both spring and fall burning on all neotropical migrant birds were very little or none. Out of 32 bird species monitored, only one, the dusky flycatcher, showed a possible effect from spring burning.
- 2. Indirect effects of spring and/or fall burning resulted in overall habitat enhancement from renewed vegetation.
- 3. June and July are the most critical time for successful productivity for birds. If burning is done before late May, all birds will likely renest again (Allyson Turner/Rex Sallabanks).

Rex Sallabanks, Ph.D. (Sustainable Ecosystems Institute) indicated that 5 years of results from the Twin Lakes wildfire monitoring effort in Idaho showed that:

Some species and guilds increased after the fire, while others decreased. Overall, the first 1-2 years post-fire was negative to most species, and beneficial to a few. After 5 years, the effects tend to shift to a much higher positive effect for most species, with only a few species negatively affected. Canopy foliage gleaners (warblers, kinglets, etc.) were negatively affected in moderate and severely burned sites. Aerial insectivores (dusky flycatcher, olive-sided flycatcher, western wood pewee) were much more abundant in medium and severely burned areas. Cavity nesters as a group were positively affected by the fire. Only the red-breasted nuthatch did not increase after the fire.

### \*\*\*\*\*

# Item 1e: Acres of Big-Game Habitat Improvement

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

### Reporting Period: Annually

**Variability that would initiate further evaluation:** More than one year of variability from planned improvement acreages, excepting variances due to extreme fire conditions.

\*\*\*

### Wildlife Habitat Improvement:

### Monitoring Results:

In FY 2001, the Forest accomplished a total WL/TE habitat target of 1,714 acres plus an additional 700 acres co-funded by the Rocky Mountain Elk Foundation. Prescription burning accounted for the improvements. Funding assistance and support of the Rocky Mountain Elk Foundation have been instrumental in thousands of acres of past habitat improvements for elk and numerous other species on the forest.

### Cumulative Acres of Big Game Habitat Improved (Prescribed Fire, Timber Harvest, Wildfire, and Wildland Fire Used for Benefits)

Fiscal	Acres
Year	Improved
1988	109,854
1989	13,432
1990	10,062
1991	7,738
1992	49,907
1993	7,284
1994	12,847
1995	2,030
1996	44,351
1997	3,048
1998	3,055
1999	6,623
2000	33,389
2001	26,774

### Evaluation of Monitoring Results:

Improvement of elk and deer winter range has fallen short of the annual target of 5,000 acres by at least 41 percent. The cumulative shortfall over 10 years is at least 30,000 acres below Forest Plan projections.

### \*\*\*\*\*

# Item 10: Population Trends of Indicator Species - Wildlife

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

### Reporting Period: FY 2001

**Variability that would initiate further evaluation:** Variability thresholds which will trigger further evaluation for each species must be tailored to each species based on the amount of existing data on a given species, natural population fluctuations; and for game species, impacts of harvesting on populations. Evaluation for big-game species will be done cooperatively with Idaho Department of Fish and Game.

Variability thresholds for non-game and Threatened and Endangered species for which data is currently limited, can only be determined after sufficient baseline population data is collected. Population viability determinations for most large-bodied or wide-ranging species must be determined across the species' range, often at much larger landscape scales than simply one national forest.

### \*\*\*

This section covers those Management Indicator Species that were not previously discussed in this report within the Threatened, Endangered, or Sensitive wildlife species categories.

### Elk:

Elk herds are the product of habitat quality, influenced by the effects of weather, hunting, and predation. Forest management practices directly affect habitat quality and hunter access. To determine trends in elk herds within a managed forest environment, the Idaho Department of Fish and Game routinely conducts elk winter census surveys.

To address weaknesses in local elk herd productivity, the Nez Perce and Clearwater National Forests have partnered with Idaho department of Fish and Game (IDFG) and other interested parties to help improve conditions through the Clearwater Elk Initiative.

### Monitoring Results:

Elk surveys were reported by IDFG on Nez Perce National Forest hunt units 19 and 20 in FY 2001. IDFG winter census surveys since 1988 have yielded the following results:

Unit <sup>2</sup>	15	16	16A	17	19	20
1988			$1028\pm261$	$4506\pm535$		
1989					$1467\pm37$	$1044\pm48$
1990	$856\pm81$	$818 \pm 122$				
1991			$961\pm201$	$3783 \pm 279$		
1992					1497	$1237\pm61$
1993	$1236\pm310$	$1432 \pm 156$				
1994						1115
1995			$475 \pm 114$	$4995\pm555$		
1996	1544	1148			1566	1277
1997	No data	No data	No data	No data	No data	No data
1998	$17.5\pm7.5$	No data	No data	No data	No data	No data
1999	No data	No data	539	3188	No data	No data
2000	No data	No data	No data	No data	$\textbf{2143} \pm \textbf{228}$	$854\pm869$
2001	No data	No data	No data	No data	2143 ± 228	$854\pm869$

### Elk Population<sup>1</sup>

### **Bull:Cow Ratios**

Unit	15	16	16A	17	19	20
Objective <sup>3</sup>	>20	>20	>25	>25	>25	>25
1988			$35\pm14$	$26\pm5$		
1989					$21\pm2$	$26\pm4$
1990	$20\pm5$	$10\pm5$				
1991			$23\pm8$	$22\pm3$		
1992					$17\pm2$	$31\pm5$
1993	11 ± 5	$22\pm4$				
1994						19
1995			$19.6\pm20.6$	$20.9\pm3.7$		
1996	9.6	11.9			15.0	21.4
1997	No data	No data	No data	No data	No data	No data
1998	$17.5\pm7.5$	No data	No data	No data	No data	No data
1999	No data	No data	12.7	16	No data	No data
2000	No data	No data	No data	No data	$16\pm 4.5$	$\textbf{23.3} \pm \textbf{4.2}$
2001	No data	No data	No data	No data	$16\pm 4.5$	23.2 ± 4.2

<sup>1</sup> Represents total population estimate of animals on the winter range of each unit.

<sup>2</sup> Idaho Department of Fish and Game, Big Game Management Unit

<sup>&</sup>lt;sup>3</sup> Idaho Department of Fish and Game, 5-year Elk Management Plan Objective (1991 to 1995); expressed as number of bulls per 100 cows. Note: Hunting regulations and season structure changes implemented beginning in 1998 by IDFG were designed to help address bull:cow ratios.

Unit	15	16	16A	17	19	20
1988			32	27		
1989					24	22
1990	39	16				
1991			30	24		
1992					32	34
1993	$43\pm17$	$21\pm4$				
1994						24
1995			$14.7\pm5.1$	$22.2\pm3.2$		
1996	32.4	17.9			20.1	15.2
1997	No data	No data	No data	No data	No data	No data
1998	32.8 ± 10	No data	No data	No data	No data	No data
1999	No data	No data	21.5	11.9	No data	No data
2000	No data	No data	No data	No data	$26.2\pm4.2$	$20.2\pm3.1$
2001	No data	No data	No data	No data	26.2 ± 4.2	20.2 ± 3.1

### Calf:Cow Ratios (Calves per 100 Cows)

### Evaluation of Monitoring Results:

FY 2001 results may have been skewed by temporary displacement of animals by the fires of 2000 and 2001. Elk calf recruitment remains depressed in back country hunt units further complicating population recovery. Mild winters, varying degrees of hunter success (influenced largely by hunting season weather conditions) can also affect population data within any given hunting unit.

### Moose:

### Monitoring Results:

Moose populations are not surveyed on the Nez Perce National Forest by the Department of Fish and Game with any techniques capable of making accurate population estimates.

#### Evaluation of Monitoring Results:

Moose populations appear to be relatively stable based on incidental information and sightings. Hunter permit numbers have increased substantially in recent years.

### **Bighorn Sheep:**

Monitoring Results:

Unit	17	19	20
1991	52	000	000
1992		52	106
1993		60	66
1994	28		87
1995	43		
1996	No data	56	78
1997	No data	No data	No data
1998	No data	No data	No data
1999	No data	No data	No data
2000	No data	53	51
2001	No data	53	51

### **Bighorn Sheep Total Counts**

### Evaluation of Monitoring Results:

Idaho Department of Fish and Game biologists suggest that FY 2000 data may have been influenced by temporary displacement of animals due to short-term habitat changes resulting from wildfires.

### Pileated Woodpecker:

### Monitoring Results:

Due to inadequate staffing and other priorities, including neotropical bird habitat and populations sampling, no permanent transects were sampled in FY 2001. A summary of six years of data is displayed below for pileated woodpecker from the Green Creek Point transect, the most thoroughly monitored transect on the Forest. Cumulative Forestwide survey results from other transects are available in previous year reports.

Unit	Total
1988	9
1989	9
1990	6
1991	13
1992	6
1993	No survey
1994	No survey
1995	No survey
1996	5
1997	No survey
1998	No survey
1999	No survey
2000	No survey
2001	No survey

### **Bighorn Sheep Total Counts**

### Evaluation of Monitoring Results:

Available data from previous year counts and routine sightings across the forest landscape suggest that pileated woodpecker populations are relatively healthy and stable. Dramatic declines in clearcutting of late seral and over mature grand fir stands since 1990 on the Forest have substantially helped reduce pressure on late-seral and old growth forests, this bird's preferred nesting habitats.

### Pine Marten/Fisher/Lynx:

### Monitoring Results:

Though no formal surveys were conducted during 2001, three incidental sightings of fishers were reported: Road 222 (approximately 100 yards south of the Darby Montana Road) and two others observed in Soda Creek on the 9541 road. The second location is an area that was heavily harvested and somewhat fragmented in the past, but the clear cuts are fully stocked now and are about 20 years old.

Three unconfirmed sightings of Canada lynx were reported on the Forest in FY 2001. Lynx are closely tied to snowshoe hare abundance in most areas, and relative numbers of sampled snowshoe hares is considered an indication of potential lynx carrying capacity. Early seral tree and shrub densities over most of the Forest fall short of high quality habitat for lynx in most places. Relatively high variability of hare densities has been monitored locally. Snowshoe hare track relative abundance surveys conducted during 1999 revealed the following:

Forest Type	Road Number	Approximate Transect Distance Age of Snow		Track Sets
Lodge pole	492/478	<3 miles	16 hours	326
Grand fir	9804/9805/0985A	<4 miles	16 hours	23
Lodge pole	492/478	<3 miles	24 hours	31

Irrespective of presence or absence of Canada lynx on the Forest, some forest management activities within designated lynx habitats are now governed and guided by the Lynx Conservation Assessment and Strategy.

### Goshawk:

### Monitoring Results:

No new goshawk sightings or new nests were reported in FY 2001. Goshawk monitoring was conducted on the Cow Creek, Cayuse Meadows, and Delmage Ridge nest territories. No response from local goshawks was recorded. Only responses by gray jay and crow were recorded. Absence of current use of the only nests currently known within these territories was inconclusive. Goshawks characteristically alternate annual use of from 2 to as many as 9 different nests within a given territory to avoid predation on nestlings. Dramatic overall declines in regeneration timber harvest, but particularly in late seral and over mature stands since the mid-1990s on the Forest has substantially reduced pressure on this bird's nesting habitats. Goshawks remain relatively common on the Forest.

### \*\*\*\*\*

# Item 11: Validation of Resource Prediction Models: Wildlife

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

### **Reporting Period:** 2 to 6 years

**Variability that would initiate further evaluation:** Major or significant refinements to wildlife models will be determined through coordination with other agencies including the Nez Perce Tribe and should be supported by research findings and will require Forest Plan amendment. Local biologist judgment and experience is currently being used to supplement and temper the elk guidelines model in specific management situations as recommended in the current guidelines.

### \*\*\*

The Forest has completed a cooperative effort to evaluate and offer recommendations to update the elk summer habitat guidelines. Wildlife biologists and agency managers from the Idaho

Department of Fish and Game, Nez Perce Tribe, Clearwater National Forest, and Nez Perce National Forest completed the tasks explored by the Venture 20 effort. Biologists reviewed the elk model methodology for applicability and consistency, and have produced a draft of recommended changes.

A Forest Plan amendment or revision process with public input must be used if these recommended elk modeling modifications resulting from the Venture 20 exercise or similar coordination are formally proposed to update the Forest Plan.

### **\*\*\*\*\***\*\*\*\*\*

# **FISHERIES**

# Item 1f: Fish Habitat Improvements

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

Reporting Period: Annually

**Variability that would initiate further evaluation:** ± 10 percent of Plan targets within a decade.

### \*\*\*

This section reports the annual accomplishments in fish habitat improvement on the Forest. These accomplishments are measured as miles of stream improved. This accounts for both the direct instream improvements and improvement activities upstream or upslope of the fish habitat that result in the improvement of fish habitat condition.

The projects that contribute to fish habitat improvement include a wide variety of activities, from direct instream work to projects that address ecosystem conditions or processes that result in the deterioration of fish habitat, such as sediment contributions. The projects that contribute to fish habitat improvement often contribute to other management accomplishments. These projects are often co-funded and reported based on the funding proportions. Fish habitat improvement is reported as those that contribute to anadromous fish (species that migrate to the ocean, such as Chinook and steelhead), and inland fish (resident fish species that remain in inland waters such as westslope cutthroat trout and bull trout). Project accomplishments are reported based on their contribution to these groups and the relative funding proportions.

In FY 2001, the Forest accomplished 25 miles of anadromous fish habitat improvement. Additionally, 9 miles of inland fish improvement were accomplished. Examples of projects that contributed to this accomplishment include: Implementation of the O'Hara instream improvement project, continued road decommissioning in O'Hara Creek, and riparian and streamside planting in Peasley Creek and Meadow Creek watersheds.

# Item 2e: Fish Habitat Trends by Drainage

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

**Reporting Period:** 1 to 5 years (FY 1998 to 1992)

**Variability that would initiate further evaluation:** A measured decrease of 10 percent or more below established objectives.

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This monitoring item reports the trend in fish habitat condition based on evaluation of 24 permanent monitoring stations across the Forest. These stations are measured 3 years out of 5 in order to evaluate the habitat trend over long periods. Assessment of the data collected at these monitoring stations is ongoing. At this point, results of this monitoring are not available.

### \*\*\*\*\*

# Item 2p: Implementation of PACFISH and Effects of Management Activities on Anadromous Fish

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

Reporting Period: Annually

### \*\*\*

The Nez Perce Forest Plan was amended by PACFISH (Amendment 20) in response to the need for increased focus on at risk fish species. Additionally, because some of these species are listed under the Endangered Species Act (ESA), ongoing and proposed management activities are evaluated in Biological Assessments (BA) to determine the effect of these management activities on these listed species. In FY 2001, the Forest continued to evaluate the effects of management activities on fisheries resources through the completion of Biological Assessments, and associated concurrence from the National Marine Fisheries Service (NMFS) and Fish and Wildlife Service (FWS).

\*\*\*\*\*\*\*\*

# TIMBER

# Item 1h-1: Allowable Sale Quantity (ASQ) Sold by Components

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

Reporting Period: Annually

**Variability that would initiate further evaluation:** Any change in ASQ achievement altering the implementation of the long-term goals and objectives displayed in Forest Plan Chapter 2 (Forest-wide Management Direction) and Chapter 3 (Management Area Direction) may necessitate a Forest Plan Amendment.

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### Discussion:

The allowable sale quantity (ASQ) is defined as the maximum timber value that may be sold during the planning period from the suitable land base. The ASQ is a sold-volume ceiling, and is monitored early against the average annual ceiling of chargeable volume for the decade. We are now in the second decade (starting 1998) since the Forest Plan Record of Decision (ROD) was signed.

The ASQ increases from 1,080 MMBF in the first decade to 1,380 MMBF in the second decade (see page 6 of the ROD). In the past, the chargeable volume was divided into two components: regular (green live and recently dead resulting from insect/disease or fire) and non-interchangeable (pulp/cedar products and endemic mortality). Non-chargeable volume is not considered as part of the ASQ when it is sold, since this component was not use din calculating the ASQ, but is used to calculate accomplishments for Management Attainment Report (MAR) targets. Products that are included in the non-chargeable component include: firewood volume removed from unsuitable lands and volume too small or defective to meet regional utilization standards such as post and poles.

The Forest Plan does not identify how the additional 30 MMBF second decade volumes would be distributed to the regular and on-interchangeable components of the ASQ. For reporting purposes, we are assuming that the entire amount will be added to the regular portion giving the Forest a 1,330 MMBF of regular components and 50 MMBF of non-interchangeable ASQ. In addition, the Forest Plan does not identify which management areas will provide the extra volume.

Although this item is monitored on an annual basis, actual ASQ achievements will be based on the decade total. Yearly figures may be above or below the Forest Plan average annual ASQ figure of 138 MMBF per year (133 MMBF regular and 5 MMBF non-interchangeable).

The Forest Service reports accomplishments in hundreds of cubic feet (ccf). To maintain consistency and assure past figures are comparable, this report will continue to display volume in terms of MMBF. To convert MMBF to ccf, simply divide the MMBF values by .562, which is the Forest's average conversion factor. This cubic foot to board foot conversion factor is dependent on the height and diameter of the trees that are sold. On a yearly basis, some slight variability can be expected from the average Forest conversion of .562 which is used to convert the ASQ MMBF to ccf as indicated on the following table:

138 MMBF = 245,640 ccf
133 MMBF = 236,740 ccf
5 MMBF = 8,900 ccf

### Monitoring Results:

Though no formal surveys were conducted during 2001, three incidental sightings of fishers were reported: Road 222 (approximately 100 yards south of the Darby Montana Road) and two others observed in Soda Creek on the 9541 road. The second location is an area that was heavily harvested and somewhat fragmented in the past, but the clear cuts are fully stocked now and are about 20 years old.

### Chargeable Volume Sold in FY 1988-2001\*

(Volume Credited Toward ASQ on an Annual Basis MMBF)

	Components				
	Poquiar (122.0)	Non-Interchar (NIC) (5	Total		
	Regular (155.0)	Pulp	Cedar Products	Total	
FY 1988	104.8	1.3	2.4	108.5	
FY 1989	68.9	7.6	1.1	77.6	
FY 1990	70.2	10.3	2.7	83/2	
FY 1991	94.3	4.8	3.5	102/6	
FY 1992	1.3	14.2	0.1	15.6	
FY 1993	32.1	10.2	0.1	42.4	
FY 1994	6.6	6.4		13.0	
FY 1995	7.5	6.4		13.9	
FY 1996	25.6	2.5		28.1	
FY 1997	21.1	0.3	0.2	21.6	
FY 1998	24.5	0.2	0.2	24.9	
FY 1999	12.9	0.9		13.8	
FY 2000	0.5	0.0		0.5	
FY 2001	9.5	1.1		10.6	

\* The ASQ accomplishment breakdown was based on the Nez Perce Periodic Timber Sale Accomplishment Report accumulated as of September 30, 2001 (fiscal year summary).

The Forest continues to sell well below the Forest's ASQ, with this year's accomplishment being approximately 7 percent of the regular component and 22 percent of the non-interchangeable component. In FY 01, the Forest sold 1.1 MMBF of the non-chargeable component (not counted as part of the ASQ). This was preliminary firewood (both commercial and personal use) and post/pole material. Three sales were offered, sold, and awarded in FY 2001.

### ASQ Volume Sold to Date

Average Annual ASQ (2 <sup>nd</sup> Decade)	2001 Chargeable Volume Sold	Total Chargeable Volume Sold to Date	% of Average Annual ASQ Sold for the First 4 years
133.0/year (saw logs)	9.5 MMBF	47.4 MMBF	12
5.0 MMBF/year (pulp/cedar products)	1.1 MMBF	2.4 MMBF	16
Total 138.0	10.6 MMBF	49.8 MMBF	12

% = Percent of average annual ASQ sold for first four years of second decade.

# Item 1h-2: Finance Volume Offered Attainment by Components

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

Reporting Period: Annually

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### Discussion:

Each year congress appropriates funding to accomplish annual timber targets. Given the fluctuation in funding from year to year, these annual "timber targets" are not necessarily the same as the Forest's average annual ASQ. The achievement of financed "timber targets" differs from ASQ achievement in the following ways:

- Accomplishment of "timber targets" takes place when a sale is offered, as opposed to ASQ accomplishment credited when a sale is sold. Normally, 45-60 days elapse between sale offering (advertisement in the local paper) and sale selling (signing contract). Sales offered near the end of the fiscal year may be credited toward the "timber target" in one fiscal year and credited toward ASQ in the next fiscal year.
- 2. Non-chargeable offered volume (firewood and posts/poles) may be included in "timber target" achievement. The ASQ volume does not include non-chargeable volume.

Monitoring Results: Three sales were offered in FY 2001.

### Chargeable and Non-Chargeable Volume Offered in FY 2001\*

	Volume (MMBF) – FY 2001
Assigned Target	20.5
Accomplishment (Volume Offered)	10.3
% of Target	50 %

\* Target accomplishment based on year-end Periodic Timber Sale Accomplishment Report (PTSAR) taken from the stars database year-end summary.

### **Evaluation of Monitoring Results:**

Three sales were offered for sale in FY 2001. A fourth sale (9.5 MMBF) was scheduled for offer in the fiscal year but was delayed due to NEPA appeal processing. This fourth sale was offered in the first quarter of FY 2002. If this sale had been offered in FY 2001, 100 percent target accomplishment would have been completed.

# Item 1i: Acres Timber Harvested by Method

# (Includes Precommercial Thinning)

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

Reporting Period: Annually

**Variability that would initiate further evaluation:** Unacceptable results of an interdisciplinary review.

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### Monitoring Results:

Harvest took place on just over 2,000 acres in FY 2000. This was an increase from FY 1999 of approximately 650 acres. By far the majority was uneven-aged management (almost 55 percent). Even-aged management was implemented on 526 acres, or 26 percent of the harvest acres. The remainder, 19 percent of harvest acres, was various kinds of cuts that removed only portions of the stands, leaving fully stocked stands in place.

Harvest Type	Acres	Percent of Harvest
Pre-commercial thinning	73	10.2%
Clear-cut w/Reserves	213	29.7%
SW Prep Cut	74	10.3%
Shelterwood Seed Cut	162	22.6%
Seed Tree Seed Cut	103	14.4%
Intermediate Cuts	93	12.8%
Total	717	100.0%

	Even- Aged Harvest	Unevened- Aged Harvest	Ratio
Planned Annual Harvest	4,815	125	38.52
FY 2001 Actual Harvest	717	0	100.0

### **Evaluation of Monitoring Results:**

The Forest Plan envisioned the mix of harvest types to be weighted toward even-aged management. The current **mix** is a deviation from that planned mix. Because the "total acres harvested" is below the maximum shown in the plan. The **actual acres** of uneven-aged harvest are within the planned acres for the decade. This deviation from the planned mix of harvest will not result in serious consequences.

# Item 2f: Vegetative Response to Treatments

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

**Reporting Period:** 5 years (FY 1998)

**Variability that would initiate further evaluation:** Data and analysis that would indicate that projected yields from regenerated stands are in error.

\*\*\*

### Monitoring Results:

Permanent growth plots provide a means to assess and predict the forest growth response to silvicultural treatments. They specifically are used to assess the accuracy of managed stand yield tables used in the forest planning models. The Forest has a number of permanent growth plots, installed over the years. Generally a few are re-measured each year, and in FY 2001, eight were re-measured.

### **Evaluation of Monitoring Results:**

Eight permanent growth plots were re-measured during FY 2001. For sampling accuracy, the plots from several years need to be combined and then compared to be the managed stand yield tables. That comparison will be made when there are sufficient numbers of re-measured plots by forest type and productivity class to make statistically valid samples. At this point, for individual stands, growth seems to be near the projected rates.

### \*\*\*\*\*

### Item 4: Acres of Harvested Land Restocked Within 5 Years

**Frequency of Measurement:** Annual for 1-, 3-, and 5-year old regenerated stands (October 1, 2000 – September 30, 2001)

### **Reporting Period:** 5 years

**Variability that would initiate further evaluation:** An interdisciplinary team reviews significant deviation from 5-year regeneration period after data.

\*\*\*

### Monitoring Results:

This item is monitored using the Regional Reforestation Indices. Data is stored in the Timber Stand Management Record System. For FY 2001, 94 percent of stands planted in the past 5 years are successfully reforesting. Ninety percent of stands planned for natural regeneration are successfully reforesting. First year plantation success for FY 2001 is at 100 percent. Those not progressing satisfactorily are scheduled for additional treatment to increase stocking to acceptable levels.

### Evaluation of Monitoring Results:

Spring of 2001 was particularly warm and dry, and plantation success was a little lower than usual. It is still near the forest average, and within the range expected given to the vagaries of weather. Animal damage, primarily pocket gopher damage, also contributes to reduced plantation success.
#### \*\*\*\*\*

## Item 5: Site-Specific Examination to determine Suitability of Land for Timber Management

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

Reporting Period: 10 years (FY 1998)

Variability that would initiate further evaluation: Significant changes in suitable acres.

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#### Monitoring Results:

The Forest Plan identified suitable lands when it was approved in 1987. As stands are examined, suitability is evaluated and recorded in the timber stand database. No unsuitable lands have become suitable.

#### **Evaluation of Monitoring Results:**

Since the Plan was approved, there have been individual stands that did not meet the suitability requirements set in NFMA. These minor changes in suitability do not warrant a wider review until the Plan is revised.

\*\*\*\*\*

## Item 6: Maximum Size Opening for Harvest Units

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

Reporting Period: Annually

**Variability that would initiate further evaluation:** Unacceptable results of an interdisciplinary team review.

\*\*\*

#### Discussion:

Openings, as addressed in the Northern Region Guide, apply to all even-aged silvicultural systems, which include clear-cut, shelter wood seed cuts, and seed tree seed cuts. For timber management purposes, these are openings until they have adequate stocking that averages 2 ½ feet or more in height. For wildlife and watershed purposes, they are no longer openings when the total woody vegetation (including shrubs) is adequately stocked and at least 15 feet high.

#### Monitoring Results:

No units over 40 acres in size were sold in FY 2001.

\*\*\*\*\*

## Item 11: Validation of Resource Prediction

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

Reporting Period: Annually

**Variability that would initiate further evaluation:** If validation efforts show a need for changes to existing resource predictions.

\*\*\*

#### Validation Monitoring:

The Forest Plan contains estimates of the following four elements for the acres contained in timber sales scheduled to be sold during the first decade. These estimates were used to help derive the Forest's allowable sale quantity (ASQ) ceiling.

- Net volume per acre by silvicultural system
- Total acres by silvicultural system
- Distribution of total acres (%) by silviculture system
- Total acres by Management Area (MA)

The following four tables display the actual FY 2000 data taken from sales sold during this period. Sales contained in the actual FY 2000 sold data include all sales of chargeable (ASQ) volume having an appraisal (Forest Supervisor and District Ranger authority sales). Sales offered that did not sell are not included.

Silvicultural System	FY 2001 Volume/Acre (MBF)	Weighted Average* FY 2001 (MBF)
Clear-cuts (Units)	0.0	0.0
SW Prep Cut <sup>1</sup>	0.0	0.0
SW/ST Seed Cut <sup>2</sup>	0.0	0.0
SW/ST Final Cut <sup>3</sup>	0.0	0.0
Sanitation/Salvage	40.0	40.0
Commercial Thin	10.9	11.3
Selection Cut <sup>4</sup>		
Totals	50.9	11.1

#### Table 11-a - Sold Net Volume/Acre by Silvicultural System

\*Weighted by acres sold.

<sup>&</sup>lt;sup>1</sup> First entry in a 3 or 4 step shelter wood. The goal is open up the canopy to improve seed production.

<sup>&</sup>lt;sup>2</sup> Regeneration cut, where the trees left will provide the seed for the next stand of trees.

<sup>&</sup>lt;sup>3</sup> Final harvest of a SW/ST ...commonly called an "overstory removal". Figures shown in the actual sold volume/acre include both final harvest of "managed stands" and liberation harvest (overstory removal in natural stands).

<sup>&</sup>lt;sup>4</sup> This refers to an uneven aged management...either group or individual tree selection.

Silvicultural System	FY 2001 Distribution %	Weighted Average FY 2001 Distributed %
Clear-cuts (Units)	0.0	0.0
SW Prep Cut	0.0	0.0
SW/ST Seed Cut	0.0	0.0
SW/ST Final Cut	0.0	0.0
Sanitation/Salvage	1	1
Commercial Thin	99	99
Selection Cut		
Totals	100%	100%

#### Table 11-b – Distribution of Sold Acres by Silvicultural System

#### Table 11-c – Total Acres Sold by Silvicultural System

Silvicultural System	FY 2001 Acres Sold	Average FY 2001 Acres/Year
Clear-cuts (Units)	0.0	0.0
SW Prep Cut	0.0	0.0
SW/ST Seed Cut	0.0	0.0
SW/ST Final Cut	0.0	0.0
Sanitation/Salvage	5	5
Commercial Thin	708	708
Selection Cut	0	0
Totals	713	713

#### Table 11 d – Distribution of Sold Acres by Management Area

MA Code	Management Emphasis	FY 2001 Acres Sold	Average Acres/Year
10	Riparian		0
12	Timber	381	381
16	Timber/Elk/Deer Winter Range	319	319
17	Visual/Scenic	13	13
20	Old Growth	0	0
21	Moose Winter Range	0	0
	Totals	713	713

The following acres and timber volume sold on the Nez Perce National Forest were within inventoried roadless areas in the second decade.

### Roadless Volume and Acres Sold by Fiscal Year

Fiscal Year	Roadless Volume Sold (MMBF)	Roadless Cutting Units & Road Right-of-Way Acres
2001	0	0
Total	0	0

#### **Roadless Acres Sold by Roadless Area**

Number	Name	District	Sold Acres	Percent of Total Roadless Sold Acres
None			0	

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## SOIL AND WATER

## Item 1j: Soil and Water Rehabilitation and Improvements

**Frequency of Measurement:** Annually (October 1, 2000 – September 30, 2001)

Reporting Period: Annually

**Variability that would initiate further evaluation:** If the Forest did not achieve its assigned target for the fiscal year.

\*\*\*

#### Implementation Monitoring:

The Forest was assigned a target of 10 acres of soil and water improvements using appropriated watershed funds in FY 2001. The Forest reported 24 acres of accomplishment using watershed funds and an additional 38 acres using other funds, for a total annual accomplish of 62 acres. The Forest Plan goal is 200 acres per year.

#### Summary of Improvements Accomplished in Fiscal Years 1988-2001

	Funding Source						
Year	Soil and Water (NFSI & NFES)	Knutsen-Vandenberg (KV)	Roads	Other Funding	Total		
1988	74	52	113	70	309		
1989	131	93	57	147	428		
1990	159	82	76	3	262		
1991	120	85	25	32	262		
1992	214	79	82	12	387		
1993	244	108	90	63	505		
1994	243	79	77	43	442		
1995	314	74	54	5	447		
1996	190	46	2	1	239		
1997	143	4	24	19	190		
1998	85	4	0	0	89		
1999	81	0	60	0	141		
2000	169	7	61	0	237		
2001	24	0	10	28	62		

#### (by Acres Improved)

The following is a brief summary of 2001 watershed improvement projects by ranger district.

<u>Salmon River Ranger District</u>: The District reported 17 acres of accomplishment. Projects included completion of the Deadhorse road-to-trail conversion, Rag Station Trail improvement, North Fork Slate Creek range exclosure, Hite Springs improvement, west fork Allison road improvement, Burnt Flats Fire revegetation, and road decommissioning associated with the Taco Fire.

<u>Clearwater Ranger District</u>: The District reported 37 acres of accomplishment. Projects included decommissioning of roads in the 2021 area of the lower South Fork Clearwater River, revegetation of decommissioned roads in the Hungry Mill area, decommissioning of a road in

the Lodge Point area, landslide repair in Clear Creek, stream restoration in the McComas Meadows area, Fish Creek range exclosure, and Burnt Flats Fire revegetation.

**<u>Red River Ranger District</u>**: The District reported 1 acres of accomplishment. This was associated with cleaning of a sediment trap associated with the Leggett hydraulic placer mine.

**Moose Creek Ranger District:** The District reported 7 acres of accomplishment. Projects included revegetation of decommissioned roads in the O'Hara Creek watershed, improvements on the Copper Butte Trail, and improvements associated with the remount site on Coolwater Ridge.

#### Effectiveness Monitoring:

#### **Evaluation of Monitoring Results:**

From 1988 through 1996, the Forest exceeded its Forest Plan watershed improvement goal of 200 acres per year. This goal was not achieved for fiscal years 1997 through 1999, but was again exceeded in fiscal year 2000. In fiscal year 2001, the Forest had its lowest level of watershed improvement accomplishment since the Forest Plan came into effect.

An overall evaluation of the watershed improvement program has not been conducted. In recent years, the nature of improvement projects have changed, with larger projects being developed to decommission unneeded roads. This has resulted in relatively high unit cost projects and lower total acres accomplished. However, per unit area treated, the on-the-ground effects of such projects are probably more significant and long lasting than many earlier approaches. This trend reversed somewhat in fiscal year 2001, with a higher percentage of low unit cost projects again being completed. In the foreseeable future, several large projects that include watershed restoration are scheduled for implementation. Although future funding is unknown, it appears the Forest could be financially limited in its ability to implement these projects.

#### \*\*\*\*\*

## Item 2g: Impacts of Management Activities on Soils

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

Reporting Period: Annually

**Variability that would initiate further evaluation:** If more than 20 percent of an activity area has sustained significant or permanent impairment of the productivity of the land.

\*\*\*

#### FY 2001 Soil Monitoring:

Soil monitoring is conducted during project planning, implementation, and following completion of management activities to determine how closely Forest Plan management standards are being followed.

**Implementation Monitoring** determines if the potential for soil damage was evaluated during project development and if designated best management practices (BMPs) were applied.

Effectiveness Monitoring determines if the implemented practices were adequate to:

- 1. Maintain 80 percent of an activity area in a productive condition, without detrimental compaction, displacement of surface soil, or puddling (loss of soil structure), and
- 2. Minimize erosion and sloughing on road cuts and erosion on other activity areas.

**Validation Monitoring** determines whether the data, assumptions, and coefficients used in soil and vegetation response models are correct.

#### **Results:**

#### Implementation Monitoring:

Most environmental analyses and watershed assessments completed in fiscal year 2000 used soil information to describe soil limitations and opportunities within assessment areas, evaluate impacts of past management, and develop recommendations for avoidance, restoration, or mitigation.

The Meadow Face project initiated a new phase in soil monitoring and improvement in areas affected by past land disturbing activities. It is a watershed heavily impacted by past logging machinery, with extensive areas of compacted soils, filled wet areas, and skid trails that have altered slope hydrology. Aerial photo inventory identified 8,422 acres where impacts had likely occurred over some portion of the land. Field inventory in fiscal year 2001 of 1,360 acres in Orchard, Whitman, and Swan Creek subwatersheds identified 88 acres of decompaction and skid trail obliteration needs, plus additional stream channel restoration needs. Additional inventory is proposed for fiscal year 2002. Other watersheds that have sustained similar impacts will require soil restoration inventories as part of the watershed assessment process.

Soil information was consistently used to predict sediment production. Predicted sediment was used to help select number, location, and scheduling of activity areas.

Landform, stream, slope, and soil information was used with watershed historic files and photos to delineate landslide prone terrain for watershed assessments and most timber sale analyses. Field reviews were used to refine those delineations, avoid areas of risk, or adjust project designs to minimize risk. Watershed staff, sale layout foresters, marking crews, and sale administrators have become increasingly skilled at hazard identification and marking or harvest unit adjustment to minimize risks.

#### Effectiveness Monitoring:

#### Pinchot Fire Soil Erosion and Knapweed Monitoring

The Pinchot Fire was detected on July 9, 1999, and eventually burned about 374 acres under a confine/monitor strategy. Natural fire effects and recovery processes were objectives for the area under the Selway-Bitterroot Management Plan. The area is very susceptible to mass failure in channels and on steep slopes after soil disturbance. Spotted knapweed invades any disturbed area in the breaklands, and supplants native bunchgrasses. Knapweed is though to increase the change of erosion in the breaklands, because of the abundant bare soil between plants, and reduced root biomass and ground cover. Line transects were set up to monitor increase in soil erosion and knapweed spread. Results from 1999 to 2000 were reported in the 1999 monitoring report.

The objectives of monitoring are to:

- 1. Determine if knapweed expands in burned areas beyond its rate of expansion in unburned areas.
- 2. Determine if erosion in burned areas where knapweed becomes established exceeds erosion in areas where native plant species recover after fire, given equal burn severity and site factors.

#### Data Summary for fiscal years 1999-2001:

Bare soil in the burned areas has declined from 45 to 39 percent over the two years since burning. There was no evidence of accelerated erosion in knapweed plots compared to other plots. There was evident sheet erosion in transect 3 due to very steep slopes, bare soil, and grussic material. This erosion is probably chronic whether burned or not.

The graph below shows frequency of knapweed occurrence in the sample plots. Knapweed occurrence may be increasing slightly faster on burned than unburned areas.



The graph below shows knapweed density (numbers per 200 square inch micro plot). Knapweed density appears to be increasing faster in the unburned area. In none of the three years were differences between unburned and burned areas significant. However, over burned and unburned areas together, increases in knapweed density between 1999-2001 and 2000-2001 were significant (P=. 006 and .015) using a Wilcoxon signed rank test. Since the sampled unburned area is a bunchgrass habitat type most highly susceptible to invasion, it looks like habitat susceptibility may be more important than burning, but that disturbance like fire is still influential in knapweed expansion, even in somewhat less susceptible habitats like Douglas firninebark.

NEZ PERCE NATIONAL FOREST 14<sup>TH</sup> ANNUAL MONITORING AND EVALUATION REPORT





Bare soil has decreased slightly on both burned and unburned areas, and there is no significant correlation of bare soil on each micro plot and knapweed frequency or density. Accelerated erosion did not appear to be related to knapweed, but to slope, soil texture, ground cover, and burn severity.

Similar transects were installed in the Three Bears fire (burned 2000) in 2000 and read again in June 2001. Transects are also scheduled for installation in the Taco and Earthquake fires (burned 2001) in 2002.

#### **Riparian Range Monitoring**

No effectiveness monitoring of riparian range management occurred in 2001, because of limited funds.

#### Fire and Suppression Impacts Rehabilitation Monitoring

Monitoring of effectiveness of rehabilitation of fire suppression impacts occurred on the Burnt Flats fire (burned 2000) where extensive fire lines, drop point and safety zone disturbances were treated with decompaction, water barring, removal of log culverts, slope restoration, seeding, mulching, and barriers to livestock.

Where surface soil removal was shallow and discontinuous, recovery was generally good on dry sites because native seed and plants were still present and more nutrient rich surface soils were present. Sown native perennial grasses were very slow to establish and subject to grazing if not protected by slash. Native bulbs appeared to be fairly resilient to minor disturbance. In compacted areas, decompaction by excavators followed by dragging was highly effective in preparing a seed bed, and also appeared to support rapid recovery of residual native bulbs and perennials. Decompaction using a harrow was ineffective and consequent recovery or establishment of seed was poor. Temporary fencing to keep cattle and ATV traffic was necessary, but required consistent maintenance to remain effective.

In forest sites with deep soils, dozer line obliteration was effective and erosion has so far been very slight on the areas that had been reviewed. The large water bar at Little Whitebird Creek crossing could have channeled water directly into the stream and was unnecessary given the amount of slash available. On open sites, such as old clear cuts, frost heaving appears to have locally affected grass seed establishment on obliterated dozer lines, and cattle traffic and weed establishment will likely result in additional treatment needs.

Effectiveness of erosion control measures including seeding, mulching, water bars, and drainage restoration at crossings on the 9443 road are still problematic and should be reviewed in 2002, as well as the large very steep dozer line on the west side of Goose Creek, and the dozer line on the bluebunch wheatgrass site off Goose Creek Point.

Review of suppression activity impacts resulted in several recommendations for future fire management that could result in less soil, water, and plant community resource damage from suppression activities. Their implementation would be contingent on the fire management situation analysis, including risk to other resources, life and property, and safety. These recommendations include:

- 1. Provide interdisciplinary support to the unit and resource advisor to make sure the fire management ream is aware of environmentally sensitive areas like the open ridges that support rare plant communities or heritage sites.
- 2. In large complex fires, provide additional support members to help with dozer line, safety zone, and drop point location and resource protection and riparian area protection.
- 3. Evaluate the resource risks and benefits to plantation protection
- 4. Work with dozer bosses and operators to make sure they recognize stream crossing and are aware of alternative construction tactics for line construction in riparian areas and on shallow soils.
- 5. Establish standards for the fire team to document locations of lines, safety zones, and drop points so that a cumulative record is maintained throughout the fire and available to the rehabilitation team.

- 6. Mobilize a dedicated suppression rehabilitation team early in the suppression of complex fires, and ensure that rehabilitation inventory and planning work is initiated in all areas safe to do so as soon as possible.
- 7. Incorporate effects of suppression activities into watershed assessments and watershed impact databases.
- 8. Ensure that rehabilitation plans are reviewed and approved by district access planner, resource staff, and district ranger.
- 9. A formal rehabilitation team organization was shown to be effective, where lines of authority are well defined.
- 10. Resource advisor support to rehabilitation is crucial and in large complex projects, multiple resource advisors may be needed to stay up with several activities going on concurrently.
- 11. Support from the suppression rehabilitation planning team is generally necessary through the implementation phase.
- 12. Strengthened technical expertise in stream crossing restoration for both dozer lines and old roads is advised for rehabilitation planning team members and resource advisors.
- 13. The resource advisor or implementation team members need to closely supervise operators so that erosion control structures are effectively implemented with the least ground disturbance.

Review of the Burned Area Emergency Rehabilitation measures in Bull Run Cove indicated generally good effectiveness. Rehabilitation measures to reduce impacts from the fire itself included road drainage improvement on the Bull Run Cove road, weed treatments for yellow starthistle in low elevation areas, and stream response monitoring. Runoff from the private salvaged lands above the road had been curtailed with water bars. Culvert capacity on the road had been increased and road drainage improved. Disturbance to open up the inlet at the main crossing was excessive, and rock installed below that culvert was smaller than it needed to be most effective. Other culvert and drainage work was well done. Runoff and erosion on the severely burned area was slight, thanks to a mild spring and the erosion-resistant nature of the surface soils and their high permeability.

Weed spraying was done, but the scope of yellow starthistle invasion is larger than could be addressed with hand spraying. An EIS is planned for 2002 that would evaluate more aggressive weed treatment proposals.

#### Validation Monitoring:

#### Landslides

Data from the 1997 landslide inventory has been compiled and preliminary summaries are presented here.

Heavy rains triggered numerous landslides in the winters 1994-95 and 1995-96. An inventory was done in 1997 that used aerial photos, aerial reconnaissance, and district reports to identify slope failures. Two hundred forty-two slides were identified on the Forest and 164 of these were

field sampled. The graph below shows the percent of each sample set on Nez Perce Forest lands, by apparent primary cause. Roads were highly associated with landslide occurrence, although they typically are a small proportion of the landscape. Timber harvest was not often associated with slope failures, but landslides could be very large. Areas recently burned by wildfire are a very small percent of the landscape and the incidence of landslides in this setting was also small. This was perhaps because the burned areas were out of the general storm tracks for these years.

#### \*\*\*\*\*

### Item 2h: Impacts of Management Activities on Water Quality

#### Frequency of Measurement: Annually

**Reporting Period:** October 1, 2000 – September 30, 2001

**Variability that would initiate further evaluation:** If violations of Idaho State Water Quality Standards were detected or if Forest Plan fish/water quality objectives were not met within acceptable timeframes.

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#### **Effectiveness and Validation Monitoring:**

As in previous years, the Forest collected stream flow and water quality data at eight gauging stations (Rapid River, Little Slate Creek, Johns Creek, Upper Red River, South Fork Red River, Trapper Creek, Main Horse Creek, and East Fork Horse Creek). Variables sampled included stream discharge, suspended sediment, bed load sediment, water temperature, and conductivity.

Watershed personnel also maintained seven storage precipitation gauges, five recording precipitation gauges, five hydrothermographs, and two snow courses. Fire personnel conducted additional weather monitoring.

Water temperature data are collected at about 50 sites across the Forest, using electronic reading thermographs. Data collection under this program began about 1990 and has continued each year since then. The period of record varies by station.

Physical stream channel morphology measurements are taken at about 20 permanent stations across the Forest. Each of these was initially measured during the period of 1988-1990. About half of the stations have been remeasured, with the remainder planned for remeasurement.

The Northern Region continued evaluation of high mountain lakes for sensitivity to long-term deposition of atmospheric sulfate, nitrate, and ammonium. On the Nez Perce National Forest, Shasta Lake, located in the Selway Bitterroot Wilderness, was selected as a long-term study site. Field data were collected at Shasta Lake in 1996 and 1998-2001.

#### **Evaluation of Monitoring Results:**

Analysis of stream flow and sediment yield data from the gauged water quality monitoring stations is ongoing. From 1995 through 2001, particular emphasis was given to data analysis pertaining to instream water right claims filed under the Snake River Basin Adjudication.

In 1998, a computer database named Aquatemp was set up for storage and retrieval of the Forest's water temperature data. In 2001, analysis of water temperature data for the Newsome

Creek watershed was completed. Data were also prepared for the total maximum daily load (TMDL) assessment underway in the South Fork Clearwater River.

Until fiscal year 1991, the Forest issued an annual technical report entitled "Hydrologic Data Summary and Monitoring Analysis." This report summarized stream flow and climatic data collected on the Forest during the previous year. It also provided more detailed analysis of water quality and related monitoring results than the annual Forest Plan monitoring report. There is no plan to resurrect the annual report format, but the data are available upon request, both in paper copy and electronic format.

#### \*\*\*\*\*

## Item 2i: Water Quality – Project Level Administration Reviews and Field Studies

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

#### Reporting Period: Annually

**Variability that would initiate further evaluation:** If the reviews or studies discover violations of Forest Plan standards or Idaho Water Quality Standards.

#### \*\*\*

#### Monitoring Results:

Implementation and effectiveness monitoring was accomplished on several types of activities in fiscal year 2001. Primarily interdisciplinary teams of Nez Perce National Forest personnel conducted the monitoring, with assistance from other agencies. In one case, the monitoring was conducted under contract.

In addition to monitoring Forest Plan implementation, these field reviews also meet the Forest's obligation under a Memorandum of Understanding with the State of Idaho to monitor a target of ten percent activities that fall under the Idaho Forest Practices Act Rules.

#### Deadhorse Road Decommissioning

This monitoring review was conducted on August 8, 2001. The project is located in the Slate Creek watershed of the Salmon River Ranger District. In addition to the Deadhorse project, the review assessed firewood gathering within a riparian habitat conservation area (RHCA). The Deadhorse project was found to meet all applicable Idaho Forest Practices Act Rules, with the exception of notification. Below is a site-by-site discussion of the areas reviewed:

#### 1. Firewood Gathering at Willow Creek:

This is a popular site for firewood gathering. It is accessible most of the year and there is a lot of mortality. The site is often used in late fall or early spring. Firewood collection is occurring within riparian habitat conservation areas, where it is prohibited. Trees have been marked with paint and 'wildlife tree' tags in the past. Law enforcement has been called to the site multiple times.

#### **Opportunities**:

a. The District is discussing a seasonal gate closure below this point, at the North Fork Campground;

- b. Need to review firewood permit language to remove ambiguity, and ensure enforceability; and
- c. Install an informational sign.

#### 2. Road 354G Reconditioning at the mouth of Little Slate Creek:

A heritage site was identified following contract award. Design was modified – a sediment trap was deleted and the drivable dip was constructed with the archeologist on site.

Recommendation: Add rock in ditch from last dip to bridge.

# 3. Non-motorized trail constructed on road bed of obliterated Road 354G and old bridge abutment removal site:

Revegetation (seeded annual rye, fertilizer, and straw mulch) came in very quickly and well. The ample rainfall was probably a large factor. Recontouring did not start immediately at new trailhead, because it is stable and lacks watershed concerns. Therefore, the old road is visible; 'inviting' motorized trial users. Dips in the road discourage use, but are not aesthetic. It was felt that recontouring the first 500 feet would have been more effective at vehicle control and aesthetically. Generally the cost of recontouring is about 150 percent of scarification. Removal of 36 inch corrugated metal pipe and channel reconstruction was nicely done. Work was completed during July1 to August 15 fisheries window. Trail meanders on old roadbed; adds aesthetics.

#### 4. Constructed Trailhead, Road 354G:

The trailhead/turnaround was constructed with minimal additional ground disturbance. Slopes are gentle and stable. Vegetation has established quickly. There may be a tendency to park in the turnaround area.

<u>Recommendation</u>: The additional need for an unloading ramp, to avoid the use and damage of the road bank was noted.

#### 5. Recontoured roadway (no trail):

This piece of road had experienced multiple failures, with the debris path extending into Little Slate Creek. Work was completed during the July 1 to August 15 fisheries window. Partial recontouring of old road appears effective and efficient. Upper cutbank slopes are still exposed but stabilized.

#### 6. Motorized trail constructed on roadbed of obliterated Road 354G:

The work appears to have stabilized the roadway, but probably is still functioning more like a narrow road than a trail. Abutment removal at Deadhorse Creek looks effective and stable.

Recommendation: Fords should be monitored for continued drainage functionality.

7. General Review: Project was well executed. Trails constructed into stream crossing may benefit from reduced gradient by turning the trail upstream, into the draw, as the ford is approached. Subsequent contracts could specify (salvaged) clump plantings in recontoured areas. Required Forest Practices for abandoned roads were met. With no in-stream work, a stream channel alteration permit was not needed.

#### Middle Face and Mill Helo Timber Sales

These timber sales are located in the Johns Creek and Mill Creek watersheds on the Clearwater Ranger District and were reviewed by an interdisciplinary team on October 18, 2001. All applicable provisions of the Idaho Forest Practices Act rules were met on the areas reviewed. Below is a site-by-site discussion of the areas reviewed:

#### 1. Unit 93/Temporary Road – Middle Face Timber Sale:

This shelterwood/seed tree unit was tractor logged in the fall of 1999, followed by excavator piling. The access road was pre-existing and required some reconditioning. After use, it was decompacted and put into a "road storage" condition. This means that the road was closed to use with the template left in place for future use. It appeared that the treatment was effective for erosion control, though some weeds were present and cattle use was occurring.

#### 2. Unit 48/Road 309 R – Mill Helo Timber Sale:

This unit was an overstory removal that was tractor logged in the summer of 1999. The unit was whole tree yarded with slash burned at the landings. It appeared that there was low ground disturbance on the skid trails. Road #309R was pre-existing, reconditioned for hauling logs, and subsequently recontoured. It was located adjacent to an unnamed tributary of Deer Creek. The recontouring was completed in an exemplary manner, including the machine work and use of vegetation transplants. Though there was evidence of cattle trailing and grazing, there was little evidence of sediment movement off the road prism.

#### 3. Unit 52 – Mill Helo Timber Sale:

This was a commercial thin that was helicopter yarded. The unit was subsequently under-burned using aerial ignition. The treatment was generally successful, except for some unplanned mortality on about 17 percent of the area.

#### 4. General Discussion:

Though not visited on the review, it was noted that several temporary roads that had been designated for single season use instead were used for more than one season. This pointed out the operational difficulty of single season roads in some circumstances. It was also pointed out that the watershed improvement projects designed to offset the sediment impacts of the timber sales were implemented.

#### Otter Wing Timber Sale

The Otter Wing area is located on the Clearwater Ranger district, south of the South Fork of the Clearwater River. A watershed analysis was conducted in the Otter Wing area in 1995 to determine the potential impacts of road building and timber harvest activities in the Otter Creek, Wing Creek, and Huddleson Creek drainages. The timber sale was described in the 1996 Biological Assessment as 558 acres of timber harvest and related activities with 12 miles of road construction, including 1 mile of temporary road. The analysis highlighted a concern for increased sediment to the streams within the sale area as well as to the South Fork Clearwater River.

In August 1995, prior to implementing the project, permanent monitoring stations were established at seven stream locations just below the sale area boundary. Stream channel cross

sections were measured to identify the channel type (Rosgen, 1994). Stream stability was recorded (Pfankuch, 1978). Large woody debris was measured and counted, and the channel substrate was recorded (Wolman, 1954).

The road construction and timber harvest activities for this sale were completed in 2000. These seven stations were remeasured in August 2001. Comparison of channel geometry, stream stability, large woody debris, and bed material do not show any consistent trend changes in stream condition. Individual parameter changes are generally slight and do not appear to represent changes in stream dynamics.

In addition to the existing stations, three additional stations were established in fiscal year 2001 at the mouths of Otter Creek, Huddleson Creek, and Wing Creek. A detailed report of this monitoring is available at the Clearwater Ranger District. Follow up monitoring will be scheduled in 3-5 years.

#### Mackey Day Timber Sale

This timber sale is located on the Red River Ranger District in the Tenmile Creek watershed. District personnel reviewed it several times during the year. These reviews focused on specific areas of concern within the sale area.

Blowdown had occurred on about 1/3 acre, part of which was in proximity to a wetland. This area was reviewed to determine if removal of the blowdown was feasible and also after removal. The removal was accomplished using full suspension skyline yarding and resulted in minimal ground disturbance.

System roads associated with the timber sale were reviewed for erosion control needs. Although several areas of erosion were noted, no sediment delivery to streams was documented. Where problems were noted, measures were taken to reduce the erosion and/or trap sediment prior to reaching streams.

Skid trails, forwarder trails, and temporary roads were reviewed for compliance with decommissioning provisions. The decommissioning was determined to be successful, with good decompaction, scarification, and scattering of slash. No surface erosion was noted. In one instance, additional small slash was suggested to improve protection from raindrop impact and provide more nutrients.

An area of winter logging was observed and very little soil disturbance was noted. The operation was occurring on 1.5 to 2.0 feet of snow. It was noted that there might be an inconsistency when designated skid trails are required, but follow-up treatment prescribes grapple-piling. This should be addressed in terms of the requirement that detrimental soil impacts be limited to no more than 15 percent of project areas.

#### Burnt Flats Fire

The Burnt Flats Fire burned about 19,000 acres in the White Bird watershed in fiscal year 2000. Established channel sites were revisited at the two upper locations in the drainage. At each location two cross sections and a longitudinal profile were surveyed. A pebble count was completed and photos taken.

Visible changes to the channel form were not evident. Shrub and forb vegetation has recovered in moderate densities in the riparian area and uplands.

Analysis of the data will begin following a revisit to all established sites next summer.

#### Haysfork Hydraulic Placer Mine

The Haysfork Hydraulic Placer Mine (also known as Haysfork Glory Hole) is a historic mine located in Newsome Creek on the Red River Ranger District. Rehabilitation efforts have been ongoing for many years, with the most recent being installation of an engineering sediment trap near the point where sediment-laden flow from the eroding pit would enter Newsome Creek.

The sediment trap has been effective at preventing all but the finest suspended sediment from entering Newsome Creek. In 2001, it was noticed that the two standpipes that drain the sediment pond were beginning to buckle. The pond was drawn down to a low level in the fall of 2001 and repairs are planned in 2002.

Revegetation of the eroding pit wall and deposited sediment downslope is continuing to improve overall conditions on the site, though considerable erosion is still occurring. Further monitoring and assessment of future needs is planned for 2002.

#### O'Hara Creek Habitat Improvement

This project is located on lower O'Hara Creek on the Moose Creek Ranger District. The project reconfigured existing fisheries habitat improvement structures and added new structures in certain locations. The objective was to improve hydraulics and habitat effectiveness of the structures. Suspended sediment and turbidity were sampled during reconfiguration of two structures. These particular structures were selected because they had the greatest potential for short-term impact during construction.

Upstream (i.e. background) turbidity ranged from 0.81 to 1.66 ntu and suspended sediment ranged from 8.7 to 31.1 mg/l. Immediately below construction turbidity in the plume ranged from 24.8 to 68.3 ntu suspended sediment ranged from 270 to 6213 mg/l. Turbidity below a mixing zone ranged from 4.8 to 7.7 ntu and suspended sediment ranged from 69 to 190 mg/l.

In one case, the State turbidity criterion of not exceeding 50 ntu above background was exceeded for an estimated duration of 10 to 15 minutes. This occurred when a considerable amount of accumulated bedload was released during removal of a structure. Ocular observations during construction of new structures suggested that turbidity was considerably less.

Salmonids, including adult Chinook salmon, were seen in the vicinity during construction. Though no direct mortality was noted, the high levels of suspended sediment were within the range that have been documented to be detrimental. This was partially offset by the short duration, but occurred during periods of high stress due to high water temperatures.

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### Item 2j: Impacts of Management Activities on Riparian Areas

**Frequency of Measurement:** Annually (October 1, 2000 – September 30, 2001)

Reporting Period: Annually

**Variability that would initiate further evaluation:** If the reviews or studies discover violations of Forest Plan standards.

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#### 2001 Riparian Monitoring Results:

Riparian area monitoring is conducted during project planning, implementation, and following completion of management activities to determine how closely Forest Plan management standards are being followed.

#### Implementation Monitoring determines

- If riparian areas are delineated and evaluated during project design
- If preferential consideration is given to riparian-area-dependent resources in cases of irresolvable conflict;
- If appropriate provisions of the Idaho Forest Practices Act (BMPs) are applied, or a variance sought; and
- If effects on wetlands and flood plains are considered in project development.

In addition, monitoring determines if PACFISH standards that constitute Forest Plan amendments, or additional guidance from the regional aquatic conservation strategy are being followed.

National wetland inventory maps are consistently used for initial wetland and riparian area delineation, but site-specific projects usually result in identification of numerous additional wetlands and small streams. Preferential consideration of wetland resources now occurs very consistently, due to PACFISH standards, and consultation requirements under the Endangered Species Act.

Monitoring of road obliteration projects during contract inspection maintains quality of stream alignment and gradient, and soil stabilization at the crossing sites.

#### Effectiveness Monitoring determines

- If management practices have caused detrimental changes in water temperature or chemical composition, blockages of water courses, or deposits of sediment that seriously and adversely affect water conditions and fish habitat; and
- If cover and security for riparian-dependent species have been maintained.

Validation Monitoring is used to describe riparian dependent resources, their values, and predict effects of management (Forest Plan II-12). No validation monitoring occurred.

#### Monitoring Results:

#### Implementation Monitoring:

Readily identifiable riparian areas are consistently delineated during integrated resource analysis using National Wetland Inventory maps and field observation. This delineation is based on identification of perennial and intermittent streams and areas of soils with high water tables and water loving vegetation. Estimated acres of riparian areas and wetlands are calculated from these delineations during the management area validation process. Additional wetlands are identified and protected during project layout and implementation.

Good design and administration of road obliteration projects is critical to restoration of riparian characteristics. A long-term administrative study to evaluate stream and watershed response to

road obliteration was initiated in fiscal year 2000 on the Horse Creek Administrative Study site and will continue through fiscal year 2005.

Inventory to assess riparian condition in headwater streams now has a standard protocol, but no standard data storage or synthesis capability. Data storage in the WATER national core data format will be explored in fiscal year 2002.

#### **Effectiveness Monitoring:**

No effects from prescribed burning were detected in monitoring.

The Horse Creek road obliteration study was instrumented and the environmental analysis completed, but not signed in 2001.

#### Validation Monitoring:

Valley gradient/stream order information was used with landforms to predict probability of certain aquatic habitat elements, with good results. Reaches derived from this information will be used to assess historic fire effects in riparian areas stratified by reach, landform setting, and potential vegetation.

Refinement of Riparian Management Objectives (RMO) as described in the PACFISH amendment to the Forest Plan have not occurred during the course of watershed analysis. This issue is proposed for elevation to the Forest scale, because sufficient range of reference sites and natural disturbance states are not available within 1/5 code watershed.

#### Monitoring Evaluation:

Field reviews and monitoring will continue to be needed to ensure that an accelerated prescribed fire program results in predicted and acceptable effects to riparian areas.

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## Item 11: Validation of Resource Prediction Models – Water Quality and Fish

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

**Reporting Period:** 2-5 years

**Variability that would initiate further evaluation:** If validation efforts show a need for changes to existing predictive models.

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The Forest uses NEZSED, an adaptation of theR1/R4 Sediment Yield guidelines (USDA Forest Service, 1981) to estimate average annual sediment yields. NEZSED model tests were done on natural sediment yield for several first and second order streams in 1987. In 1994, an evaluation of NEZSED on eight 3<sup>rd</sup> to 5<sup>th</sup> order streams was completed through a master's thesis. In 1995, NEZSED was tested against sampled data from two larger sub-basins. An effort to summarize and compare results from the model tests on three scales of watersheds was initiated in 1999. No further validation was done in 2001.

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## RANGE

## Item 1g: Animal Unit Months Grazing Permits

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

Reporting Period: Annually

Variability that would initiate further evaluation: ± 10 percent of Forest Plan Estimate

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**Monitoring Results:** The Forest permitted approximately 30,190 animal unit months (AUMs) during the FY2001 grazing season. The Forest authorized through the yearly billing process approximately 24,479 animal unit months. Actual use information indicated that permittees in general placed less than the authorized level of livestock on the allotments. Forest-level actual stocking on the allotments was approximately 25 percent less than the current permitted levels.

#### \*\*\*\*\*

## Item 11: Range Analysis and Allotment Management Plan Updates

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

Reporting Period: Annually

**Variability that would initiate further evaluation:** ± 10 percent of Forest Plan Estimate

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#### Discussion:

On July 27, 1995, President Clinton signed into law the 1995 Rescission Bill (PL 104-19). A portion of the Bill, Section 504, pertained to grazing on National Forest Lands, specifically allotment NEPA analysis, and grazing permit issuance. Under the Rescission Bill, the Forest is directed to issue new term grazing permits as they expire even if the required NEPA analysis has not been completed. The Forest is to schedule the needed and required analysis. All allotments without current or needed analysis must be scheduled within the next fifteen years.

The information contained in the schedule reflects the best information available at this time and is based on current and expected funding levels. The schedule may be updated to reflect changes in resource information, Forest management priorities as a result of Forest Plan Revision and funding. At current funding level and Forest priority, all allotments that need revising will be updated by the year 2015. Due to the work necessary to complete consultation under the Endangered Species Act (ESA) and the necessary administration, the planning effort for allotment revision has been postponed to future years. Once consultation is completed, administration and monitoring is funded for all active allotments, the Forest will review the update schedule and make necessary adjustments based on ESA requirements, monitoring requirements, and current budgets.

#### Implementation Monitoring

The following grazing guidelines have been incorporated into the Annual Operating Instructions for grazing allotments. The grazing guidelines are used to manage livestock and to estimate the

time when animals need to be rotated away from sensitive stream reaches. The goal of grazing management is to maintain desirable riparian conditions and achieve recovery of streams not in satisfactory condition.

Forage Utilization: 40 percent or less of the current growth by weight, measured during the grazing period.

Shrub Utilization: 40 percent or less of the available current year's growth, measured as a percent of the leader length browsed.

Bank Disturbance: 10 percent of the bank distance.

Forest personnel monitored along stream reaches that were accessible to livestock. Forage utilization, shrub browsing and bank disturbance were estimated as the inspector walked along the designated stream reaches. The percentages represent the average levels found along the stream reaches where monitoring took place.

#### Evaluation of Monitoring Results

Monitoring suggests that, in general, permittees were successful in meeting the grazing standards stated in the annual operating instructions. Forty-eight riparian areas were monitored for forage utilization and stream bank disturbance. Monitoring by Forest personnel found that all but one of the riparian areas inspected was within the forage utilization and stream bank disturbance standard. At the few locations where use/disturbance met allowable standards, the permittee herded animals to less sensitive areas. Each time this occurred the permittees were notified and the livestock were promptly removed from the problem area. Grazing along many streams was far below the allowable levels prescribed in the annual operating instructions for 2001. Monitoring results and grazing management were reviewed and discussed with the Fish and Wildlife Service and National Marine Fisheries Service to ensure that allotment management was in compliance with the biological assessments.

#### **\*\*\*\*\***\*\*\*\*\*

## RECREATION

## Item 1a: Recreation Visitor Days

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

**Reporting Period:** 5 years

**Variability that would initiate further evaluation:** If the Forest did not achieve its assigned target for the fiscal year.

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#### Discussion:

The Forest Service is in the process of replacing the old Recreation Information Management (RIM) system with a new database system known as infrastructure or INFRA for short. Meaningful Measures (a sub-database of INFRA) was implemented in the fall of 1999. The Nez

Perce National Forest is updating the database by inventorying 20 percent of sites per year; in fiscal year 2001 up to 60 percent have been inventoried.

#### Monitoring Results:

Field personnel established baseline recreation use on the Forest through the use of traffic counters, fee campground user information, river permits, trailhead cards, and observation. Field personnel have accomplished annual updates via observation and comparison of current and previous data. Throughout the use of field observation we are able to identify recreational trends, however, we cannot generate statistically accurate recreation use numbers fro this technique. Observations in fiscal year 2001 showed higher recreation visitor use than the previous year due to snow pack, lower fire activity, and less restrictions due to fire danger and excessive smoke.

Campground parking areas: The size of vehicles and towing units have increased, exceeding designed spur lengths for recreational vehicles. If these increases continue, sites will need to be modified to provide for use.

Traffic surveillance was reactivated along the roaded recreation corridors of the Selway and Salmon Rivers, as well as the Grangeville-Salmon Road. These checks were activated to record and document use, in addition to increasing accuracy in visitor numbers used in recreation planning and budget calculations.

#### **Evaluation of Monitoring Results:**

Currently, Forest recreation use numbers are updated annually based on observations, comparison with previous data, or estimates by field personnel. The fiscal year 2000 Recreation Use Survey was a statistically based survey and was available in mid-2001, but the results are not clear due to the large range of variance in the accuracy.

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## Item 1b: Acres of Recreation Opportunity Spectrum (ROS) Category

**Frequency of Measurement:** Annually (October 1, 2000 – September 30, 2001)

#### Reporting Period: 5 years

**Variability that would initiate further evaluation:** Following a 5-year period, variation which would indicate that Forest Plan direction requiring a full range of recreation opportunities is not being met, or if the semi-primitive classes are being lost more quickly than specific in the Plan.

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#### Discussion:

The Recreation Opportunity Spectrum (ROS) is used to evaluate the recreation potential of the Forest. This spectrum defines six classes of recreation opportunities on a continuum ranging from primitive (where human disturbance is minimal) to urban (where sights and sounds of people are predominant). These classes are defined in relation to physical settings, recreational activities, and experiences. The Forest has been inventoried, mapped, and divided into four Recreation Opportunity Spectrum classes. Currently, the Forest has no rural or urban class settings.

#### Monitoring Results:

ROS mapping for the existing situation was completed in 1979. No subsequent mapping has since been done on a Forest-wide basis. Such an effort would be necessary to update Recreation Opportunity Spectrum categories or to determine changes in category classifications due to the implementation of management activities such as timber harvest. A comprehensive review of category changes would also be needed prior to completing the Forest Plan Revision and Plan Area analysis, and to determine if Forest Plan direction is being met.

#### **Evaluation of Monitoring Results:**

Upon review of what has been completed using the Recreation Opportunity Spectrum, it is evident that another category, **roaded modified**, needs to be formally adopted. **Roaded modified**, used throughout the Pacific Northwest Region of the Forest Service, has been used in some Nez Perce National Forest analyses. It best describes the recreation spectrum characterized by timber harvest units and road systems, but little in the way of recreation oriented developments. It falls between the semi-primitive roaded and roaded natural categories.

There is a need to review and update the Forest Recreation Opportunity Spectrum maps; along with modifying our existing database to track Recreation Opportunity Spectrum acreage changes.

#### \*\*\*\*\*

## Item 2a: Off-Road Vehicle Impacts

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

**Reporting Period:** 5 years

Variability that would initiate further evaluation: Unacceptable impacts caused by offroad vehicle use.

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#### Monitoring Results:

The development of a systematic method to monitor off-road vehicle (ORV) use and impacts has not been a high priority for the Forest. It is generally felt that such use (particularly that of four-wheelers and snowmobiles) is increasing in several areas.

An opportunity to evaluate off-road impacts exists as part of watershed analysis.

#### **Evaluation of Monitoring Results:**

A study of off-road vehicle impacts has not been completed and the need for understanding is increasing. Inventory of uses and impacts should be addressed as part of a comprehensive off-road vehicle monitoring plan. It is recommended that evaluation of such impacts be included as part of any watershed analysis.

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## Item 2b: Adequacy of Cultural Resource Protection, Impacts on Cultural Resources

**Frequency of Measurement:** Annually (October 1, 2000 – September 30, 2001)

#### **Reporting Period:** 5 years

**Variability that would initiate further evaluation:** A change in Section 106 of the National Historic Preservation Act of 1966 or other pertinent cultural resource laws and regulations could necessitate altering the cultural resource monitoring procedure to comply with the changes.

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#### Monitoring Results:

During fiscal year 2001, 30 projects were inventoried for compliance with Section 106 of the National Historic Preservation Act, as specified in the Forest Plan. As a result, 8,512 acres were inventoried for cultural resources and 20 new archaeological sites were recorded.

Since implementation of the Forest Plan, several American Indian religious rite areas have been identified on the Forest.

Fiscal Year	Number of Projects Inventoried	Number of Acres Inventoried	New Archaeological Sites Recorded
1988	50	3,753	36
1989	22	2,600	17
1990	35	3,137	37
1991	33	4,286	29
1992	33	3,664	37
1993	22	2,290	24
1994	42	3,429	34
1995	71	7,044	42
1996	40	4,605	62
1997	24	1,876	9
1998	34	2,365	23
1999	27	1,101	21
2000	21	1,064	13
2001	30	8,512	20

#### Cultural Resource Inventory Results

In addition to the new sites recorded, 73 previously recorded sites were revisited.

Fiscal Year	Sites Inventoried	Evidence of Vandalism/Damage
1988	10	0
1989	28	3
1990	7	0
1991	42	2
1992	22	0
1993	32	0
1994	28	0
1995	53	0
1996	71	0
1997	66	0
1998	57	0
1999	50	0
2000	67	1
2001	73	0

### Adequacy of Cultural Resource Protection

#### **Evaluation of Monitoring Results:**

None (0) of the 73 sites monitored were impacted. Monitoring of the 73 sites revealed that the recommended protection measurers were effective.

One current method being used to monitor cultural resources includes resurveying sites and recording any visible effects or changes. This information is documented in site report amendments or updates.

For Forest projects or undertakings with cultural sites, measurements were established for accurately monitoring sites eligible for the National Register of Historic Places. This was accomplished by identification of a permanent datum or controlled mapping point for each site. Recording bearing and distance measurements from the site datum to its boundaries and associated features allowed us to detect and document any changes or effects on a site during monitoring.

With the current cultural resource management funding level, it is not feasible to implement this procedure for all known cultural sites (including the ones outside of proposed project areas). An increase in the Heritage budget will be needed in order to develop a systematic procedure for more precise monitoring of sites. This is particularly needed for sites that are surrounded by ongoing management activities or are located along highly used areas such as the Salmon and Selway Rivers.

#### Heritage Projects:

The following were projects undertaken by the Heritage Department of the Nez Perce National Forest. These projects demonstrate the Forest's adherence to Section 110 of the National Historic Preservation Act of 1966.

The Nez Perce National Forest participated in Idaho Archaeology Week by hosting a display on the history of fire lookouts on the Forest. The public, as well as employees attended a slide show and presentation presented by John Crawford, Indian Hill Lookout. Mr. Crawford's

presentation included information on the history of lookouts in the area and included many beautiful photographs taken during his nearly 30 years on the lookout and also of historic lookouts on the Forest. Interest in the subject was high and everyone involved learned a great deal about the history of Nez Perce National Forest lookouts and their importance in the current fire prevention program.

The Nez Perce National Forest hosted a Passport in Time (PIT) project at a National Register of Historic Places eligible prehistoric campsite along the Selway River. Eight volunteers contributed 322 hours to the excavation project. Results of carbon analysis of materials recovered during the project indicate that the site is at least 4,080 years old. The PIT project provided volunteers with an opportunity to work alongside Heritage personnel and learn more about the field of archaeology and specifically about the prehistory of the Selway River drainage.

Restoration work continued on the National Register of Historic Places eligible Square Mountain Lookout located on the western edge of the Gospel Hump Wilderness. This log lookout was constructed in 1931 by the Forest Service to aid in the detection of fires in the area. During 2001, the shake roof was replaced with the assistance of volunteers.

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## Item 2c: Limits of Acceptable Change in Wilderness

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

#### **Reporting Period:** 5 years

**Variability that would initiate further evaluation:** If, after a 5-year review period, changes in wilderness exceeded acceptable limits.

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#### Monitoring Results:

A comprehensive wilderness-wide report has been prepared for the Selway-Bitterroot Wilderness entitled: **"Selway-Bitterroot Wilderness 2000 State of the Wilderness Report."** It contains a detailed monitoring report for the Selway-Bitterroot Wilderness. A copy is available upon request.

The Nez Perce National Forest continues to replace substandard signs in all three wildernesses as funding levels allow.

The following is a summary of wilderness implementation plans, Limits of Acceptable Change (LAC) planning, and wilderness fire plans for the Nez Perce National Forest:

#### Selway-Bitterroot:

This wilderness is managed under the Selway-Bitterroot Wilderness General Management Direction, 1992. This original document was signed by the Northern Regional Forester in 1982 and was replaced with the 1992 General Management Direction by a Nez Perce National Forest Plan amendment.

The 1992 amendment includes Limits of Acceptable Change planning for recreation, trails, and airfield management. Updated management direction for vegetation was added to the General Management Direction in 1996.

The fire management plan, suspended in 1988, was revised in May of 1990, and put into effect during the 1992 fire season. The current fire management plan was revised in June of 1999. The plan does not allow for planned ignition.

#### Gospel Hump:

A management plan for the Gospel Hump Wilderness was completed in 1985 and incorporated by reference into the Forest Plan for the Nez Perce National Forest. Campsite condition inventories are completed annually, as funding allows, establishing baseline information for the LAC process.

The fire management plan, suspended in 1988, was revised, and put into effect for the 1993 fire season. The current fire management plan was revised in 2000. The plan does not allow for planned ignition.

#### Frank Church River of No Return:

A coordinated environmental impact statement is being prepared for management of this wilderness. Campsite condition inventories are completed annually, as funding allows, establishing baseline information for the LAC process.

The fire management plan, suspended in 1988, was revised, and put into effect for the 1990 fire season. The plan allows for planned ignition. A revised plan is currently being developed with the expectation of completion prior to the 2002 fire season.

#### Coordinated Wilderness Management

Coordination of wilderness management programs and activities among adjacent administering units of the same wilderness has improved greatly. Results of this coordination are evident in all wildernesses administered by the Nez Perce National Forest.

Preseason and on-the-ground coordination meetings were held in 1996 for the Gospel Hum Wilderness, administered entirely by the Nez Perce National Forest (Red River and Salmon River Ranger Districts).

Coordinated management of the Selway-Bitterroot Wilderness (SBW) has been formalized by creating the SBW Leadership Policy Council and Steering Group comprised of members form the Clearwater, Bitterroot, and Nez Perce national Forests, as well as the Northern Regional Office. An annual SBW public meeting was held on May 4, 2002.

A similar coordination structure has been established for the Frank Church River of No Return Wilderness (FCRONR). It consists of a lead working group and board of directors. The lead working group is comprised of rangers from each district charged with management of the FCRONR, whereas the forest supervisors of the Nez Perce, Payette, and Salmon-Challis National Forests staff the board of directors. The Nez Perce National Forest continues to manage 193,000 acres previously administered by the Bitterroot National Forest.

#### **Evaluation of Monitoring Results:**

Coordinated wilderness management efforts are resulting in better, more consistent management on the ground. Improved budget accountability, wilderness planning, and better coordination among all managers of a particular wilderness are all evident. Specific accomplishments, including monitoring efforts, are included in the individual annual reports prepared for each wilderness.

A great deal of effort is being directed towards completing the environmental impact statement for the Frank Church River of No Return Wilderness.

Wilderness management continues to be closely scrutinized at the local, regional, and national levels. Concerns raised most frequently by wilderness managers include funding, personnel (especially with workforce and funding reductions), and a continuing need to better communicate with the public and Forest Service employees regarding the proper use and management of wilderness.

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## Item 2d: Achievement of Visual Quality

**Frequency of Measurement:** Annually (October 1, 2000 – September 30, 2001)

**Reporting Period:** 5 years

**Variability that would initiate further evaluation:** After 5 years of monitoring, an assessment indicates visual quality objectives are not being met.

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#### Monitoring Results:

**Visual Resource Management** classes were mapped forest-wide prior to the development and implementation of the Nez Perce National Forest Plan. The major task remains to review the inventoried and interim visual resource management objectives and adopt them to meet current on-the-ground conditions and Forest Plan direction.

An important step toward achieving visual quality direction occurred in 1989 with the approval of Forest Plan Amendment #4. This amendment added definitions to aid in understanding the terms **adopted**, **inventoried**, and **interim** visual quality objectives. It modified existing standards to remove inconsistencies in visual quality objectives, to make the standards more attuned to procedures described in United States Department of Agriculture Handbook 462, *The Visual Management System*, and to specify a methodology for documenting visual quality objective decisions. Visual quality objectives are now **adopted** for all or part of 34 USGS 7.5 min quadrangles (Wildernesses mapped on all or part of 52 quads). These maps are filed at the Forest Headquarters Office.

Visual quality is being considered and documented in most on-the-ground activities. The Forest continues to use paraprofessionals to provide assistance on a project-by-project basis. Documentation of updates/revisions to visual quality objectives should be more consistent.

Agency-wide, the Visual Resource Management system is being replaced with a new system called **Scenery Management System**. This process incorporates a public involvement component to assist with the determination of scenic values and objectives. The Forest is beginning to incorporate some of the concepts of the new system into different types of analysis, however, the Visual Resource Management system is still the primary program used for analyzing scenic resources. The landscape character, scenic integrity, and recreation opportunity spectrum chapters of the Scenery Management System have been used on recent Forest assessment projects.

#### **Evaluation of Monitoring Results:**

Progress in understanding and achieving adopted visual quality objectives is being made on most districts. The scenic resources inventory will use the Scenery Management System handbook. Monitoring and evaluation efforts should be organized and outlined as to type and process. A complete move to the process should occur with the Forest Plan revision.

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## Item 2n: Management of Designated or Eligible Wild, Scenic, or Recreational River Segments

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

#### Reporting Period: 5 years

**Variability that would initiate further evaluation:** Following a 5-year period, information that would indicate management direction for designated eligible wild, scenic, or recreational rivers is not being followed.

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#### Introduction:

The Forest leadership team identified river recreation as on of the high priority program for fiscal year 1998. In 1994, the Forest was included in the **Wild River Country** subcategory of the Northern Region's Recreation Strategy, with a primary focus on river dependent uses. This attention is understandable considering the Nez Perce National Forest is responsible for management of four classified rivers (Selway, Rapid River, Clearwater, and Main Salmon). In addition, the Forest is adjacent to other classified rivers (Snake River in Hells Canyon, Lochsa, and Middle Fork of the Salmon River). Also, suitability studies have been conducted on ten Forest rivers for possible inclusion in to the classified rivers system and six others have been identified as eligible.

#### **Current Situation:**

These rivers provide a wide spectrum of opportunities for public use and enjoyment:

- The Selway and Middle Fork of the Salmon are true wilderness rivers. The Selway is pristine, with one launch per day allowed. The Middle Fork provides opportunities to float over 100 miles with the Frank Church River of No Return Wilderness.
- The Lochsa offers exceptional kayaking and is easily accessed from U.S. Highway 12.
- Rapid River was classified primarily to protect water quality for anadromous fish and is popular with hikers and stock groups.
- The Middle Fork of the Clearwater, which also parallels U.S. Highway 12, provides unlimited access to floaters and power boaters.
- The Snake and Main Salmon Rivers flow through Wildernesses, presenting the public with opportunities for floating and powerboat experiences. Many portions of both rivers are accessible by motor vehicles, aircraft, hikers, and via horseback.

Private inholdings along all of these rivers present challenges and opportunities to river managers. Partnerships have been successfully used in collaborative management of resources and preventing or minimizing degradation of the natural setting.

The following is a list of the classified rivers the classified rivers the Nez Perce National Forest is partially responsible for managing.

Attribute	Salmon River	Rapid River	Upper Selway River	Lower Selway River	Middle Fork Clearwater River
Length	79 miles	13 miles	42 miles	19 miles	10 miles
Wild & Scenic Designation	Wild	Wild	Wild	Recreation	Recreation
Recreation Opportunity Spectrum	Semi-Primitive Motorized to Roaded Natural	Primitive to Semi- Primitive	Primitive	Roaded Natural	Roaded Natural
Resource Values and Activities Associated with River	Motorboats, rafting, private property *including scenic easements), trails, several miles of primitive roads, airstrips	Grazing, trails, outstanding water quality	Rafting, trails, some private property, outstanding water quality	Developed recreation, roads, rafting, and private lands	Roads, developed recreation, powerboats, private lands

#### **Classified Rivers on the Nez Perce National Forest**

Accordingly, river management on the Nez Perce National Forest must be viewed in a regional and national context considering how our rivers contribute socially and ecologically to the Wild and Scenic River system.

A report on this time (2n) was included in the **FY 1999 Annual Monitoring and Evaluation Report**. The next report will be in the **FY 2004 Annual Monitoring and Evaluation Report** 

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## FIRE, INSECTS, AND DISEASE

## Item 1k: Acres and Numbers of Wild and Prescribed Fires

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

**Reporting Period:** 5 years (last report was in FY 1997)

**Variability that would initiate further evaluation:** Unusual number of person-caused fires over the 10-year average, indicating a trend of specific cause(s). Unusual number of acres burned is unexplainable, such as unusually severe fire danger based on the burning index and the energy release component. Unusually high cost of fire suppression (over the 10-year average); inability to meet expectations contained in the National Fire Management Analysis for the Forest as per budget level allocated for current year.

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#### Monitoring Results:

#### Fire & Aviation Management Preparedness

Our goals are to prevent, suppress, and manage fire commensurate with resource values to be protected, while recognizing the role of fire in the ecological processes. We will implement the five Key Points of the National Fire Plan (NFP) which are; firefighting preparedness, restoration and rehabilitation of burned areas, hazardous fuels treatment, community assistance, and accountability. The NFP is the Plan of Work identified in *The Impacts of Wildfire on Communities and the Environment, A Report to the President In Response to the Wildfires of 2000.* 

#### Our objectives in 2001 were to:

Implement the Region 1 Workforce Plan; adding additional firefighting positions (key point #1 & #5).

Continue to stress **SAFETY** as the first priority in all fire management activities with special emphasis on the aviation program.

Integrate "*Ecosystem Management*" concepts into fire management programs. Look at ways to utilized and incorporated fire treatment into sustaining healthy ecosystems, concentrating on restoration of fire adapted ecosystems (key point #2).

Continue fire use to accomplish management objectives for hazardous fuel reduction, site preparation, wildlife habitat improvement, and ecosystem management through prescribed fire and wildland fire use programs (key point #3). Continue wildland fire use implementation consistent with the Forest Plan and National Fire Policy.

Continue cooperation with other fire protection agencies; and evaluate fire protection boundaries to promote economic and efficient fire suppression. Work with communities to increase fire protection capability and support expansion of economic diversity (key point #4).

The winter of 2001 was quite mild with temperatures well above normal and snow pack well below normal. The 2001 fire season proved to be challenging, drought conditions developed through the winter and very high to extreme fire danger conditions existed by mid-summer. The graph displays 2001 fire danger for the fire weather zone that covers the Nez Perce Forest. Fire danger rose steadily from early June, and was above average throughout the summer. The average and maximum lines on the graph use 1975 through 1999 weather data, the 2000 and 2001 data show that the past two summers have been significantly above average. By August burning conditions became more severe with Energy Release Components (ERCs) and Burning Indices (BIs) above the 90<sup>th</sup> percentile, they remained there for nearly two more months.

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The Forest continued implementation of the Federal Wildland and Prescribed Fire Management Policy. This policy was adopted nationally in 1998, incorporates nine (9) guiding principles, and provides consistent fire management direction for all federal agencies.

Funding to protect Forest resources from fire is based on the National Fire Management Analysis System, an analysis tool designed to determine the most efficient level of fire protection budget. This analysis is based on fire history, fire weather, and past organizational levels. It then establishes the most cost efficient mix of personnel, equipment, and budget needed to provide firefighting resources to met land management objectives. The program was last certified in 1997 and the most cost efficient organization was determined, costs to produce MEL are updated annually through out year budget submissions.

The Forest's budget request for 2001 was \$3,548,000.

The Forest received the most efficient level of funding, up significantly from of \$2,732,000 for FY2000.

The Forest had 36 personnel actions adding or promoting permanent seasonal firefighting positions. Six fire management apprentices were selected and trained.

Clear/Nez Fire Zone met with Fire Cooperators on a number of issues and programs, including the development county disaster plans, community protection, hazardous fuels treatment around communities, and on economic development strategies.

Type of Fire	7	1998	1999	2000	2001	5-Year Average
Lightning Fires	69	189	145	139	68	122
Person-caused	5	5	16	7	14	9
Total	74	194	161	148	72	135
Wildland Fire Use (Not included in total)	17	19	31	2	17	17

#### Number of Fires

The Forest hosted two large fires in 2001, Taco and Earthquake. The Taco Fire was an escaped lightning fire on the Salmon River District that eventually burned 3,350 acres. The Earthquake fire was a person caused event on the Clearwater District that burned 1260 acres.

Person-caused fires were common near Grangeville on lands protected by Idaho Department of Lands and the Nez Perce Forest. The number of person caused fires and resulting acres were considerably above average. A fire investigation task force was formed and staffed by several agencies, to combat the suspected arsonist. IDL and the Forest jointly staffed and managed many local incidents. Additionally the two agencies cooperatively established a staging area in Grangeville in preparation for additional incidents.

#### Acres Burned by Wildland Fire 1997-2001

Type of Fire	1997	1998	1999	2000	2001	5-Year Average
Lightning Fires	26	2,344	49	33,073	3,364	7,771
Person-caused	3	1	1,752	5	1,376	627
Total	29	2,345	1,801	33,078	4,740	8,398
Wildland Fire Use (Not included in total)	16	1,734	1,272	20	7,249	2,058

Additional data is available in the Clearwater/Nez Perce Fire Zone Aviation and Fire Management Annual Report.

#### Prescribed Fire

Spring burning conditions were conducive to good accomplishment in the river breaks grass and brush fuels.

An interdisciplinary team established for the Salmon River Canyon Project continued an interagency and multi-forest effort to produce an environmental impact statement. The project proposal was modified based on the fires of 2000, which burned within several project watersheds; the project now proposes to treat slightly over 100,000 acres on the Nez Perce Forest.

The projected outputs for activity fuel treatment and hazardous fuels treatment were 6265 for the 1998 the 2007 period in the Forest Plan. The Nez Perce National Forest accomplished 13,297 acres of hazardous fuel treatment and 1060 acres of brush disposal treatment. This exceeded the expected Forest Plan outputs for fuels treatment. Our fuels treatments are

expected to continue near the current level with a focus on Wildland Urban Interface treatments and in dry habitat type outside their range of natural variability. Year-end review of BD (trust fund) balances showed adequate funding available to complete all planned work.

The Ranger Districts reviewed several prescribed burn projects, including Elkhorn Jersey. The monitoring of these projects shows that they are meeting objectives and that sensitive resources are being protected. Each district is also reporting burned acres for wildfires, wildland fire use, and prescribed fire, and the percentage of riparian areas burned as part of the Programmatic BA for anadromous fish.

#### Wildland Fire Use

Within the three Wildland Fire Use areas on the Nez Perce Forest (Gospel Hump, Frank Church River of No Return, and Selway Bitterroot), 17 fires were managed for benefits, burning 7,249 acres in FY 2001. The Wildland Fire Use program was constrained by high fire danger (National Preparedness Level 4 and 5 preclude additional Wildland Fire Use events) and a lack of support and suppression resources.

Wildland Fire Use events were very limited until the mid September storms provided more starts. Dry and warm conditions persisted for approximately 3 weeks after these ignitions resulting in 7,249 acres of Wildland Fire Use. District Fire Managers managed these events with a modest amount of outside support.

The Forest has been a leader in using lightning ignitions to capture the benefits of fire in fire dependent ecosystems. Wildland Fire Use for Resource Benefits has grown steadily over the past decade. Our increasing experience with beneficial fire and line officers willingness to take risks, have combined to increase the acres positively effected by fire use. (See chart below)



The Nez Perce National Forest, along with other federal, state, and private agencies of the North Idaho Airshed Group, continued their dialogue and cooperation to minimize or prevent the accumulation of smoke in Idaho to meet state and federal ambient air quality standards. (See the air quality discussion.)

#### \*\*\*\*\*

## Item 7: Insect and Disease Activity

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

Reporting Period: Annually

**Variability that would initiate further evaluation:** Significant increases in population or damage levels of insects or diseases.

\*\*\*

#### Monitoring Results:

**Douglas-fir bark beetle:** In 2001, Douglas-fir bark beetle populations expanded rapidly around the 2000 Burnt Flats fire. Pheromone baits were used to attract the beetles to weaker trees and allow some of the fire-damaged trees to recover without being attacked by the beetle. Oregon State University entomologists assisted with the work and are monitoring both beetle populations, and pheromone effectiveness. Beetle populations elsewhere on the forest remained at the higher levels found in 2000.

**Mountain pine beetle:** Mountain pine beetles at Red River killed more trees in 2000. They have now expanded to almost all stands that contain medium to large lodgepole pine in the upper South Fork Clearwater basin. Intensity of attacks within those stands is increasing, and numbers of trees killed per acre is up from 6-10 in 1999, to 10-20 in 2000. Forest Health Protection specialists continue to monitor mountain pine beetle conditions. Forest Health Protection personnel expect that mountain pine beetle populations in lodgepole pine on the Red River district will continue to rise for the next three to five years. Mature lodgepole pine cover types may be functionally removed across the upper South Fork Clearwater basin.

Mountain pine beetle is also affecting whitebark pine forests, and mortality was particularly severe at Nut Basin and Southwest Butte on the Salmon River District.

**Western balsam bark beetle:** Mortality from this beetle and from the balsam wooly adelgid is difficult to distinguish from aerial surveys. Both are part of a larger complex of pests responsible for a general decline in subalpine fir throughout its range. Aerial surveys on the Nez Perce National Forest show intermingled patches of mortality from both his beetle and the adelgid. The effects of the two insects, together with other unidentified pests, have resulted in widespread mortality in subalpine fir here. Mortality attributed to the bark beetle is concentrated in the higher areas of the Forest, across the headwaters of Newsome Creek and American River, and the Orogrande Summit/Dixie area.

**Balsam wooly adelgid:** This insect was first detected in Idaho in the early 1980s. It infests true firs and is particularly destructive to subalpine fir, which it can kill in as few as three years. Higher areas of the Forest, across the headwaters of American River and Newsome Creek, and on Coolwater Ridge, have been experiencing annual mortality attributed to this insect. The recommendation from Forest Health Protection is to establish impact plots in areas with ongoing mortality in order to assess the effects of the adelgid.

**<u>Root rots</u>**: In combination with various bark beetles, root rots are causing a pervasive loss of canopy cover. *Armillaria* root disease is affecting both Douglas fir and grand fir. *Schweinitzii* root rot is affecting Douglas fir. *Annosus* root disease is affecting large, old ponderosa pines and Douglas-firs and contributing to their decline.

<u>White pine blister rust</u>: Whitebark pine is being severely affected by blister rust, and is a major contributor to a precipitous decline in whitebark pine populations.

**<u>Anthracnose</u>**: This fungus continues to affect the coastal disjunct population of Pacific dogwood in the Selway River drainage. Mortality has been high, and surviving plants are in poor condition. Monitoring plots have been established and are checked periodically as funding permits. No change in the downward trend is evident.

#### **Evaluation of Monitoring Results**

- Mortality in subalpine fir, affecting forest composition, structure, and density, could have long-term effects on lynx habitat.
- □ While losses from bark beetles and root rots are not at a critical level yet, continued losses could reduce canopy levels to the point that watersheds are affected. Concentrations of dead trees are certainly a risk factor for Wildland fire ignition, especially over the next 10 years as dead trees fall to the ground. The Red River drainage in particular is at risk to fire ignitions and has the potential to cause additional damage in a watershed system already below standard.
- □ Large, old ponderosa pines, a unique resource, are at risk from a combination of *Annosus* root disease, stem decay (predisposes the tree to being killed even by small ground fires), bark beetles, and wildland fire with increased fuel loads.
- □ Whitebark pine forests are continuing to disappear due to the combined effects of blister ruse, mountain pine beetle, and a lack of regeneration opportunities.

Subbasin and watershed assessments have recognized these disturbance processes, and their role in the ecosystem. Project analyses and subsequent vegetation treatments address them as they occur in project areas. Silvicultural prescriptions will incorporate a further step-down of the broad scope of ecosystem processes to individual stands, so that treatments are consistent with ecosystem functioning. Annual monitoring of insect and disease conditions will continue, and contribute to our understanding of disturbance trends.

#### \*\*\*\*\*\*\*\*

## FACILITIES

## Item 2k: Mitigation Measures Used for and Impacts of Transportation Facilities on Resources

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

#### **Reporting Period:** 5 years

**Variability that would initiate further evaluation:** If reviews or studies indicated that mitigation was not being implemented as specified or if effectiveness was not near the levels predicted.

#### \*\*\*

#### Discussion:

Facilities on the Nez Perce National Forest include buildings, administrative sites, property boundaries, and the Forest road and trail transportation system. Construction and maintenance of all facilities improves the safety and health of both Forest employees and the visiting public.

#### **Buildings and Administrative Sites**

Monitoring the health and safety of Forest buildings and administrative sites is not a monitoring requirement of the Forest Plan. Federal, state, and local laws and regulations govern the construction, maintenance, and use of structures, potable water systems, and sewage treatment systems.

Due to a program of regular annual inspections and forest-wide prioritization of maintenance projects, all Forest buildings, water systems, and waste water systems that are in use meet basic structural and public health and safety standards. When new research reveals potential hazards to employees and Forest visitors, testing and monitoring is done and mitigation or removal is completed to prevent human exposure to hazardous materials such as lead, radon, and asbestos in buildings, air, and water. Results of long-term radon monitoring on a regular basis across the Forest show that radon levels are acceptable except in the Slate Creek Office, where further radon mitigations measures were implemented in 2000.

Construction work completed in 2001 included the Grangeville Air Center loft addition and a new warehouse.

Major repair and maintenance projects included a main underground power line replacement at Red River Ranger Station and installation of a water meter to record water usage at the Elk City Ranger Station for the local Water District.

The Forest has three "public community" water systems that serve the Fenn, Red River, and Slate Creek Ranger Stations. There are also two seasonal work center systems and ten seasonal use lookout and recreation water systems currently operating. One system is operated by a recreation site permittee. Bacteriological monitoring of all operational water systems is completed monthly. Due to problems with aging water collection and distribution systems along the Selway River, four small campground water systems. This year, extensive chemical testing was required for all our public community systems. These tests were completed and showed no water quality problems. If any systems fail quality requirements, the problems must be corrected or the system closed to use.

The Forest maintains three sewage treatment plants, one each at Fenn, Red River, and Slate Creek Ranger Stations. Effluent from these plants is tested monthly in accordance with each site's National Pollution Discharge Elimination System (NPDES) permit requirements. The information from these tests is forwarded to the Environmental Protection Agency.

#### Property Boundaries

There are approximately 450 miles of boundary between Forest land and private landowners. Three hundred forty nine (349) miles have been retraced and posted to standard with approximately 113 miles remaining to be posted. In addition to the property lines, there is an estimated 330 miles of wilderness boundaries on the Forest. Maintenance of the existing posted boundaries continues at about 25 miles per year. Due to more difficult terrain and areas where corners have not been reestablished for nearly 100 years, the rate of boundary location is now about 4 miles per year.

With the advent of the new IBM computer system, the Land Net is being loaded into Automated Lands Program (ALP) for a GIS layer.
### Right of Ways

Although no new roads or trails are planned across private property, the Forest has a substantial backlog of roads and trails, which have been managed under prescriptive/appropriate rights. The Forest is currently working on several rights-of-ways.

### Transportation System (Roads and Trails)

Monitoring is conducted during project planning, implementation, and throughout the duration of use. Project planning provides rationale for required mitigation. Upon implementation, monitoring is continuous during contract administration as documented in contract daily diaries and during program management as documented in the facility maintenance records.

Monitoring is also performed during interdisciplinary project reviews and in the annual program review.

Mitigation is accomplished using a combination of practices and specified measures. Five specific practices are:

- 1. <u>Transportation Planning</u>, which is a detailed office effort using maps, photos, historical data, GIS data, land hazard information, and geotechnical information to identify and avoid possible stability problems and mass hazard areas and to hold road mileage to the lowest possible.
- 2. <u>Route location</u>, which ground-truths the results of the planning, refines locations, and provides further information on possible problem areas.
- 3. <u>Contract preparation</u>, which assures that mitigation measures are incorporated into drawings and specifications to be followed when the facility is built.
- 4. <u>Administration</u>, which assures compliance with the contract.
- 5. <u>Maintenance</u>, which assures that the facility continues to function and provide the level of mitigation originally intended.

In addition to Best Management Practices and the practices listed above, specific design measures can be employed to reduce effects of facilities on resources. Some of these measures are:

- 1. <u>Designed and controlled cut slopes, fill slopes, road width, and road grades.</u> These effectively reduce sediment production by fitting the roads to the land.
- 2. <u>Designed and controlled ditches, cross drain spacing, and culvert discharge.</u> These prevent water from running long distances over exposed ground. Dewatered (dry) culvert installations and special drainage such as rock filter blankets and rock buttresses were demonstrated to be effective in the Horse Creek study.
- 3. <u>Stabilization of road surface and ditch lines with competent rock</u> (rock that does not rapidly disintegrate). The effectiveness of this measure in reducing surface erosion from these sources is dramatic, often over 90 percent.
- 4. <u>Slash filter Windrows.</u> This measure was developed on the Nez Perce Forest as part of the Horse Creek study. It consists of placing logging slash at the base of fill slopes and below culverts where fish passage is not required. It is very effective treatment; sediment leaving fill slopes is reduced by 80 to 90 percent.

5. <u>Seeding and fertilizing cut slopes, fill slopes, and other disturbed areas.</u> The objective is to reduce soil erosion from these sources after one growing season. Effectiveness has been rated at 85 percent or better once vegetation has become established.

Some of these measures are immediately effective, such as culvert dewatering. Slash filter windrows are effective immediately and during the first few years; after that they may become near capacity and in some instances begin to decompose. By that time though, revegetation becomes established and more effective.

Additional mitigation, in the form of project design in consultation with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service through the Level 1 consultation process, is not an integral part of every project. This process has been established in response to requirements of the Endangered Species Act. As a result of this process, each project receives joint evaluation and assessment of potential impacts and site specific mitigations are selected to address potential for resource impacts.

### Monitoring Results:

### Implementation Monitoring

All engineering projects for FY 2000 included specific mitigation measures to reduce the impact of facilities on resources. The following mitigation measurers were used (not all were used on every project).

- Windrowing of construction slash at the toe of fill slopes;
- Rock surfacing of the entire road or at contributing areas;
- Layer placement and compaction of major fills;
- Grass seeding and fertilizing of cut/fill slopes and disturbed areas;
- Rocking of ditch lines;
- Straw bales to control erosion.
- Temporary waterbars to control erosion;
- Special project specification 204 (SPS 204) to control timing of installation of mitigation measures;
- Installation of gates and/or barriers to control traffic;
- Permanent waterbars (for trails);
- Controlled Timber haul;
- Placement of durable pit run rock blanket on fill slopes at major culvert installations to control erosion;
- Installation of drop inlets at critical locations to control erosion; and
- Construction of rock buttress retaining structures.

### Mitigation Measures Implemented on Projects Awarded in FY 2001

Project	1	2	3	4	5	6	7	8	9	10
650 Gabion Repair	N/A	N/A	Х		Х		Х	Х	N/A	Х
243 Road Repair	N/A***	N/A	Х				Х	N/A	N/A	Х
Lucky Marble Timber Sale	N/A	N/A	Х	х	х	х	Х	N/A	N/A	х
2021 Timber Sale	60-80	N/A	Х		Х	Х	Х	N/A		Х

\*\*\*No sediment mitigation specifically planned, however the repair of this BST surfaced roadway will reduce sediment.

### **<u>Table Key</u>**: 1 – Planned Sediment Mitigation (%)

- 2 Windrow Slash
- 3 Asphalt/Rock Surfacing
- 4 Rock Ditches
- 5 Grass Seeding Fertilization
- 6 Straw Bales/Mulch
- 7 SPS 204
- 8 Layer Place Fills
- 9 Temporary Waterbars
- 10 Gates, Traffic Control

Year	Reconstruction/Deferred Maintenance (Miles)**	Construction (Miles)	Obliteration (Miles)
Forest Plan	30	53	N/A
1988	53	53	
1989	152	37	
1990	91	49	
1991	144	84	
1992	101	30	2
1993	77	30	2
1994	5	14	0
1995	A2	9	5
1996	4	5	3
1997		0	10
1998	21	0	18
1999	27.5	0	22.3
2000	13.1	0	19.9
2001	6.6	0	28

### Road Construction Levels – Nez Perce National Forest (MAR)

\*\*Beginning in FY 2001, these figures represent deferred maintenance in accord with national definitions established with roads policy.

### Road Maintenance

The level of maintenance varies by road. Level 1 maintenance is applicable to roads with no motorized traffic and addresses priority items to prevent resource damage. Level 2 maintenance is applicable to roads maintained for high clearance vehicles. Maintenance levels 3 through 5 are performed on the open road system maintained to provide for passenger care

travel. Two hundred eighty-five miles of road were maintained to management objectives, compared to 1,911 miles maintained in FY 2000.

#### \*\*\*\*\*

### Item 2I: Adequacy of Transportation Facilities to Meet Resource Objective and User Needs

### Frequency of Measurement: Continuous

### **Reporting Period:** 5 years

**Variability that would initiate further evaluation:** If public opinion is significantly against the Nez Perce National Forest access management program or the program shows serious negative impacts upon resources.

\*\*\*

### Discussion:

The monitoring of this item is continuous. Due to the nature of transportation systems, their impacts upon management and use of the Forest, monitoring is both important and complex. Consequently, monitoring information comes from a variety of sources: Facility maintenance records, environmental assessment documents, public letters and requests, and biological evaluations. The Nez Perce Access Management Guide also contains methodology and documentation designed to assist in monitoring.

### Monitoring Results:

### Access Management

### Road System

• Inventory:

The current Forest inventory (October 2001) shows 3,904 miles of road in the Forest Service Road system. Of this, 958 miles are open and the remaining 2,946 miles are either closed to all vehicular traffic or have use and vehicle restrictions on them.

In 2001, the Forest updated the "Road and Trail Access Guide" (an itemized listing of access prescriptions for Forest roads and trails). This was produced as a complement to the Forest Visitor Map in an effort to provide more complete information to Forest visitors.

### Trail Systems

The Forest Plan did not project the trail miles to be maintained each year. The present Forest trail inventory includes 2,906 miles of Forest Development Trails.

### **\*\*\*\*\***\*\*\*\*\*

### MINERALS

# Item 2m: Adequacy of Mining Operating Plans and Reclamation bonds

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

**Reporting Period:** 5 years

**Variability that would initiate further evaluation:** Operating plans that need to be updated, modified; bonds that need to be increased, decreased, or return; or case files that can be closed out.

\*\*\*

### Monitoring Results:

In order to meet Forest Plan direction in minerals, it is necessary to have Plans of Operations that contain adequate measures to protect surface resources. It is also important that mining operations be implemented in accordance with the approved plans. Reclamation bonds must be adequate to cover reclamation of areas disturbed by mining. However, once the operator completes reclamation work, the bond needs to be released. This item measures how well the Forest is implementing the Forest Plan in these areas. Monitoring data is obtained from case files, routine inspections by district employees, and interdisciplinary team field reviews.

There were 29 active Plans of Operation in fiscal year 2001, as displayed by the following table:

Ranger District	Active Plans of Operation	Plans Needing Modification	Bonds Needing Revision	Bonds Needing Release
Salmon River	9	0	0	0
Clearwater	0	0	0	0
Red River	20	0	0	0
Moose Creek	0	0	0	0
Total	29	0	0	0

The Forest Plan management direction for minerals states, "Exploration and development of mineral resources will be facilitated by providing timely responses to Notices of Intent and Operating Plans." In recent years issues concerning cultural resources, threatened and endangered fish species, in addition to greater analysis needs relating to watersheds and riparian areas, have greatly slowed response times to mining proposals. Regulation timeframes are not met. The minerals budget is down from previous years, that combined with a smaller workforce means we will probably not be able to correct this problem.

In fiscal year 2001 the Forest continued to monitor and administer recreational suction dredging to prevent conflicts with ESA listed fish species. Administration of existing plans of operations was highest priority throughout the year.

The following table compares the above figures with those from previous years. Zero percent in each category would indicate the lowest degree of variation from Forest Plan direction.

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Year	Plans Needing Modification (% of total plans)	Bonds Needing Revision (% of total plans)	Bonds Needing Release (% of total plans)
1998	13%	11%	Unknown
1989	6%	15%	7%
1990	9%	9%	8%
1991	7%	15%	3.5%
1992	4%	6%	0%
1993	20%	54%	23%
1994	6%	121%	50%
1995	1%	64%	24%
1996	<1%	39%	13%
1997	15%	37%	4%
1998	44%	44%	0%
1999	7%	6%	0%
2000	<1%	0%	0%
2001	<1%	0%	0%

There are still some instances of unnecessary disturbance to surface resources due to unauthorized mining operations. In fiscal year 2001, we saw a reduction in interest by large mining companies, but a continued interest by recreational miners.

**\*\*\*\*\***\*\*\*\*\*

### ECONOMICS

### Item 3: Cost of Implementing Resource Management Prescriptions

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

Reporting Period: Annually

**Variability that would initiate further evaluation:** Changes in appropriations and expenditures to the degree that accomplishment of the Forest Plan's long-term goals and objectives are affected will necessitate a Forest Plan amendment.

\*\*\*

### Discussion

The Forest's future program is reviewed and updated annually. Future program planning is no longer an attempt to project costs of fully implementing the Plan. Instead, the Forest redistributes funds among resource areas to show current priorities, but with a total similar to past funding levels.

### Monitoring Results

Table 2, found at the beginning of this report, displays budget allocations and actual expenditures for the fiscal years 1999, 2000, and 2001. Dollars have been adjusted to constant FY 2001 values.

Table 3, also found at the beginning of this report, displays projected annual costs for FY 2002.

Corresponding activities and outputs for the years 1999, 2000, and 2001 are displayed in Table 1.

### **Evaluation of Monitoring Results**

Past monitoring has shown that funding received has consistently been less than full Forest Plan funding levels. This situation is likely to continue. It is unclear what effect these decreased budgets will have on the long-term goals and objectives of the Forest Plan. However, the activity and output levels of some resources projected at full Forest Plan funding levels have not been attained and will likely not be attained in the future.

	<b></b>	
Fiscal Year	Expenditures	Planned
1988	17.4	
1989	19.2	
1990	20.1	
1991	20.0	
1992	18.0	
1993	20.5	
1994	21.4	
1995	24.4	
1996	19.6	
1997	16.7	
1998	18.0	
1999	17.5	
2000	16.0	
2001	19.4	
2002		17.9

\$ Implementation Funding (in millions of dollars) FY 1988-2001

The previous table displays funding levels expended by the Forest over the past 13 years and the project funding level for FY 2002. Dollars for all years have been adjusted to 2001 dollars. The effects of this funding level can be seen in the sections of this report describing individual resource areas.

### \*\*\*\*\*

### Item 3a: Forest Resource Derived Revenues

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

### Reporting Period: 10 years

**Variability that would initiate further evaluation:** Any change in resource-derived revenues altering the implementation of Forest Plan long-term goals and objectives will necessitate a Forest Plan amendment.

\*\*\*

### Discussion

Resource outputs to which dollar values were assigned constitute the priced benefits included in the FORPLAN PNV (Present Net Value) calculations. While both market and non-market benefits were used in the Forest Plan to determine total price benefits, only certain resource benefits were used to determine the allocation and scheduling of prescriptions in FORPLAN. Only timber and range revenues are used in calculating returns to the government.

### Monitoring Results

<b>Field</b>	Timehar	Denge
Fiscal Year	Timber	Range
Forest Plan Projection	\$17,334,482	\$58,000
1988	6,148,521	46,552
1989	9,576,306	50,172
1990	8,582,146	52,347
1991	5,625,116	45,357
1992	9,409,810	44,323
1993	10,247,623	44,438
1994	18,044,794	47,532
1995	6,012,385	37,315
1996	6,686,668	29,140
1997	3,016,936	29,741
1998	6,070,046	27,778
1999	2,667,431	26,570
2000	3,090,384	27,321
2001	2,554,416	36,515

**Timber and Range Revenues** (all figures are in 2001 dollars)

### Timber Revenues

The differences between projected Forest Plan timber revenues and actual timber revenues in fiscal years 1988-1993 were due to two factors. First, the Forest did not experience stumpage values as high as predicted in the Forest Plan. Second, timber harvest acres in fiscal years 1988-1993 were considerably lower than the predicted average annual harvest display in the Forest Plan (see Table 1).

In addition, the revenue decreased from fiscal years 1990-1991 was largely a result of the use of different accounting methods. In particular, established purchaser credits for roads were used in FY 1990, while charged purchaser credits for roads were used in FY 1991.

The review increase from FY 1991 to FY 1994 was due to the higher volume of timber harvested, higher prices, and an evening out of the accounting method used for purchaser credit for roads that had been changed in the previous year.

The revenue decrease from FY 1994 to FY 2001 was due to fewer acres being harvested in FY 1995. The revenue increase in FY 1998, an exception during this period, was due to the extremely high value of the timber in a single sale.

Prior to the completion of the Forest Plan, sensitivity analysis was performed, examining the effect of lower stumpage values on land allocation. Appendix D of the Forest Plan Final Environmental Impact Statement discusses this analysis. The analysis illustrated that while there would be significant changes in revenues, there would be little change in the programmatic allocation of the Forest Plan.

### Range Revenues

Difference between projected Forest Plan range revenues and actual range revenues are attributed to changes in grazing fees and a change in how revenues are calculated.

The range revenues in the Forest Plan were incorrectly calculated by multiplying the 1986/87 grazing fee against the permitted Animal Unit Months (AUM) instead of Authorized Head Months of use. Range revenues are correctly calculated by multiplying the current grazing fees against the Authorized Head Months of use. A "head" is defined as a grazing animal, six months or older.

In FY 2001, grazing fees were \$1.35 per head month for cattle and horses, and \$0.27 per head month for sheep. In FY 2001, 25,029 cattle and horse head months and 12,144 sheep head months were billed.

### Evaluation of Monitoring Results

It is unclear what effect the difference in revenues received and expected will have on the Forest Plan's long-term goals and objectives.

\*\*\*\*\*\*\*\*\*\*

### EFFECTS ON OTHERS

### Item 8: Effects of National Forest Management on Lands, Resources, and Communities Adjacent to the Forest

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

Reporting Period: Annually

**Variability that would initiate further evaluation:** Unacceptable effects determined by the Forest Interdisciplinary Team.

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### Discussion

The Nez Perce National Forest is managed to do what is best for the land and resources that we hold in trust for the American people. Often those most affected by this management direction are the communities and organizations adjacent to the Forest.

Most Idaho communities and agencies are affected to some degree by the activities and management direction of the nearby national forest. One of the most obvious effects in FY 2001 was the payment in lieu of taxes (the 25 percent funds) generated from sale or lease of resources, permits, and other income generated on national forest lands. Other effects include wages from the federal work force, income from recreation and tourism, raw material to industry, cooperative agreements between agencies and the Forest Service, and demographic trends that may to some degree be attributable to activities on or condition of national forest lands.

The following are some examples of the effects of the management of the Nez Perce National Forest had on adjacent communities and agencies in FY 2001:

Payments made to Idaho County from the sale of timber, grazing, fees, other income, etc. from the Nez Perce Forest total \$2,473,396 for FY 2001. Payments to Idaho County from all national forests were \$4,927,130; which includes the Bitterroot National Forest (\$516,099), Payment National Forest (\$894,937), Salmon National Forest (\$73,476), Wallowa-Whitman National Forest (\$1,967), and the Clearwater National Forest (\$967,258). The majority of funds from the Nez Perce National Forest were form the sale of timber. The following table displays payments (all receipts) made to Idaho County from the Nez Perce National Forest since 1988.

Fiscal Year	Nominal Dollars	Constant 2001 Dollars
2001	\$2,473,396	\$2,473,396
2000	775,556	791,998
1999	666,237	693,486
1998	1,461,044	1,542,132
1997	714,852	765,249
1996	1,576,746	1,720,860
1995	1,217,808	1,355,664
1994	3,872,891	4,404,639
1993	2,197,978	2,553,831
1992	2,042,981	2,430,534
1991	1,303,797	1,591,574
1990	1,276,546	1,619,043
1989	1,243,278	1,636,278
1988	995,846	1,360,923

Primary lumber production facilities in the local area (Idaho, Lewis, and Nez Perce counties) depend upon national forest logs for raw materials. For a sawmill to be viable it should maintain a two to 3 year supply of raw material under contract at all times. The following table shows the uncut volume remaining under contract compared to the volume sold and volume harvested each year since 1987 on the Nez Perce National Forest. Obviously the supply of raw material (volume sold) from the Forest has declined

since 1991. The effect likely could be added dependence on other Bureau of Land Management, State of Idaho, Nez Perce Tribal, or private timberlands for raw materials.

Fiscal Year	Timber Harvested	Timber Sold	Volume Under Contract
1987	89.1	92.6	235.9
1988	72.9	108.5	290.0
1989	99.5	77.6	243.6
1990	93.4	83.2	220.0
1991	72.8	102.6	255.0
1992	81.4	15.6	189.8
1993	69.2	42.4	162.1
1994	89.9	13.0	75.2
1995	38.8	13.9	60.7
1996	38.3	28.1	54.1
1997	19.4	21.6	63.3
1998	29.8	22.4	55.9
1999	14.7	13.8	64.9
2000	16.0	2.3	54.9
2001			

### Remaining Timber Volume Under Contract And Timber Volume Harvested and Chargeable Volume Sold (all volume figures are in millions of board feet)

- Total expenditures for FY 2001 were \$24,014,016. These expenditures included funds based on annual appropriations to the Nez Perce National Forest by Congress, trust fund limitations, State and Private funding, emergency (flood, disaster, wildfire, and federal highway) allocations, and reimbursed funds. Beside salaries, rent, and other operational expenses, revenues were distributed to local economies through formal contracts (\$954,801 awarded), small purchases (\$2,047,572), and fire related purchases (\$3,695,689 to individuals and contractors, \$2,662,512 to Idaho Department of Lands and \$289,277 for range fence repairs).
- The cooperative effort called the Clearwater Basin Elk Habitat Initiative has been pooling USFS resources and involvement by state, federal, and private entities to help restore local elk herds.
- The Forest provides the setting for a variety of recreation experiences. Over 500,000
  recreation visitor days are estimated annually for such uses as camping, viewing
  scenery, boating, hunting, cross-country skiing, snowmobiling, and fishing. The Forest is
  nationally known for the quality of big game hunting and white water boating. Winter
  sports and wildlife viewing are also increasing. The effects of these activities contribute
  to area economies and perhaps even real property values.
- Many rivers and streams on the Nez Perce National Forest flow onto adjacent ownerships. Management activities of watersheds on the Forest may affect water quantity and quality off the Forest. Some of these effects are monitored and reported in the **Soil and Water** section of this report (see Item 2h).

### In the Future:

# <u>The Secure Rural Schools and Community Self-Determination Act of 2000 (Public Law 106-393) and the North Central Idaho Resource Advisory Committee</u>

Public Law 106-393 (sometimes called "Payments to the States") was signed into law on October 20, 2000. This legislation ends rural communities' historic dependence on timber sale receipts to finance school and road construction. The Act give counties the option of continuing to receive payments under the 25 Percent Fund Act or electing to receive their share of the average of the three highest 25 percent payments made to the state during the period of fiscal year 1986 through fiscal year 1999 (the full payment amount).

Idaho County elected to receive the full payment amount (average of the three highest 25 percent payments). Because the county was slated to receive more than \$100,000; between 15-20 percent of the funds received were to be set aside and used for forest restoration, maintenance, or stewardship projects under Title II of the Act, county projects under Title III, or both.

The Act called for the Secretary of agriculture to appoint Resource Advisory Committees to provide recommendations to the Forest Service on allocation of funds under Title II of the Act for projects on national forests.

A Resource Advisory Committee consists of 15 members and 3 replacement members, appointed by the Secretary of Agriculture for a 3-year term. The committee had 3 types or groups, with five members each, with each group representing either:

- Industry and labor interests;
- Environmental, dispersed recreation, and archeological interests; or
- Elected officials, Tribal officials, school officials, and citizens at large.

The North Central Idaho Resource Advisory Committee covers the following counties: Idaho, Clearwater, Latah, Nezperce, and Lewis. It also includes most of the Nez Perce and Clearwater National Forests.

Payments for the year 2001 were made to states and counties in December 2001 (FY 2002). The five county area of the North Central Idaho Resource Advisory Committee received over \$6.5 million. Of this amount, over \$700,000 was allocated for projects on national forest lands under Title II of the Act.

More information on the affects of the Act will be included in the FY 2002 Annual Monitoring and Evaluation Report.

### **Evaluation of Monitoring Results**

The decrease in the quantity of timber offered and sold to industry seems to be one of the most obvious effects of present management of the Forest on adjacent communities and agencies. It has prompted support for turning management, especially timber management, over to the State of Idaho.

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# Item 9: Effects of Other Government Agencies' Activities on the National Forest

Frequency of Measurement: Annually (October 1, 2000 – September 30, 2001)

### Reporting Period: Annually

**Variability that would initiate further evaluation:** Unacceptable effects determined by the Forest Interdisciplinary Team.

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### **Monitoring Results**

### **Bonneville Power Administration (BPA):**

The Forest has continued work with BPA funds, along with several agencies and landowners, to improve fish habitat, stream channel stability, and riparian conditions. Projects include channel restoration along several miles of Red River located on State and private lands, continued restoration with the Nez Perce Tribe in McComas Meadows, and operation of the sediment trap below the Haysfork glory hole.

### □ Bureau of Land Management (BLM):

The Bureau of Land Management and Nez Perce National Forest were involved in cooperative cadastral surveys. This was beneficial to both agencies, with excellent results. An annual coordination meeting continues to take place4. Activities coordinated include timber, range, mining, recreation, and water monitoring.

The Forest and Cottonwood BLM are both covered under a Master Cooperative Fire Protection Agreement and Statewide Annual Operating Plan. One of the key features of the current plan is the operation of an Interagency Dispatch Center in Grangeville.

### **Federal Highway Administration (FWHA):**

The Forest works with the Federal Highway Administration in matters related to the Forest highway program and Emergency Repair – Federally Owned (ERFO) program. Currently the Forest is involved in a proposed reconstruction with the Administration on 10.2 miles of the Salmon Road. NEPA was to be completed in FY 2001, with construction to begin in FY 2003.

### □ Idaho Conservation Data Center (ICDC):

The Forest cooperates with the Idaho Conservation Data Center in developing conservation strategies and conducting presence/distribution surveys for sensitive plants. The Data Center also provides numerous data queries about rare species sightings for biological evaluation. Each year the Data Center provides the Forest with a copy of the State Rare Element Occurrence database. The database simplifies needed data gathering and analysis required for NEPA analysis.

### □ Idaho County and Highway Districts:

The Forest works to cooperate on road maintenance with Idaho County and the Highway Districts on road sections covered by agreements. Idaho County provides fiscal cooperation with snowmobile funding in support of the snowmobile trail grooming program as well as cooperating with snow plowing services for local park and Ski and Snowmobile programs.

### □ Idaho County Weed Control:

The Forest works in close cooperating with Idaho County Weed Control in the management of noxious weeds and other exotic plants. The Forest and Idaho County Weed Control share resources and skills in implementing an integrated weed program across Idaho County and work together to improve the coordination and integration of weed programs

### □ Idaho Department of Environmental Quality (DEQ):

The Forest coordinated with the Clearwater and Salmon River Basin Advisory Groups. These groups were formed by the state of Idaho primarily to coordinate activities pertaining to Water Quality Limited Streams and the Governor's Bull Trout Recover Plan. In 2001, the Forest contributed to 303(d) assessments in the Lower Selway, Middle Salmon/Chamberlain, and South Fork Clearwater subbasins.

### □ Idaho Department of Fish and Game (IDFG):

The Idaho Department of Fish and Game works with the Forest in both collaborative and resource advocacy roles. Their involvement in FY 2001 included:

- Elk mortality research and incidental wildlife information gathering;
- Information and support to assessments of Threatened, Endangered, and Sensitive species issues on the Forest;
- Transplantation of mountain goats into wilderness lands to help maintain population viability;
- Participation in sensitive species surveys, neotropical migrant survey/monitoring, and non-game management planning;
- Input to updating winter population survey results for elk and bighorn sheep populations;
- Continuation of the interagency bull trout inventory work in the South Fork Clearwater Subbasin; and
- High lake baseline surveys to inventory fish populations and physical lake characteristics.

Idaho Department of Fish and Game activities in big game monitoring, research, collaboration in development of species conservation assessments, as well as database information from the Idaho Conservation Database provide added support and help eliminate duplicate work. Also, the department's scrutiny of Forest programs may, at times, have the potential to complicate and expand the level of detailed planning required to implement management actions.

### □ Idaho Department of Lands (IDL):

The agreement between the State of Idaho and federal land management agencies was rewritten in 1996. One of the changes was to make the exchange of resources easier. This agreement remains in effect.

The Nez Perce Forest and Idaho Department of Lands are both covered under a Master Cooperative Fire Protection Agreement and 2001 Statewide Annual Operating Plan.

### □ Idaho Department of Transportation (DOT):

The Forest works with the Department of Transportation on certain aspects of managing State Highway 14. The Forest's programmatic road maintenance requirements are being incorporated into all the cooperative road agreements.

### □ Idaho Department of Water Resources (IDWR):

Under provisions of the Stream Channel Alteration Act, the Forest consulted with the Idaho Department of Water Resources with respect to activities affecting stream channels. The Department is also involved in administering the Snake River Water Rights Adjudication.

### □ Idaho Division of Aeronautics:

The Division periodically inspects backcountry airstrips on the Forest and remains involved in new proposals and management of backcountry airstrips.

### □ Idaho Outfitters and Guides Licensing Board:

Through a formal agreement, the Forest Service and the Board coordinate the permit and enforcement process for outfitters and guides providing public services on national forest lands.

### □ Idaho Soil Conservation District (ISCD):

The Idaho Soil Conservation District is the lead agency for the Red River Wildlife Management Area restoration project. The project is located on lands administered by the Idaho Department of Fish and Game, and potentially on private lands. The Forest provided technical and administrative assistance on the project in 2001.

### □ Idaho State Historic Preservation Office (SHPO):

The Idaho State Historic Preservation Office monitors the Nez Perce National Forest's compliance with Section 106 of the National Historic Preservation Act of 1966. The office reviews all cultural resource reports and site record forms. If a cultural resource is to be impacted by a Forest activity, the impact is mitigated through consultation with SHPO.

### □ National Marine Fisheries Service (NMFS):

The National Marine Fisheries Service provided Endangered Species Act, Section 7, informal consultation support and/or concurrence on biological assessments for listed and proposed species on the Forest. In addition, NMFS provided technical assistance and support for the development of several conservation assessments and strategies for Forest species. The Forest continues working with NMFS in the Level1 consultation process.

### □ Nez Perce Tribe:

The Nez Perce National Forest was one of five forests that signed an experimental Memorandum of Understanding (MOU) with the Nez Perce Tribe in 1998. This particular MOU exempts tribal members from paying campground fees at developed campgrounds and from stay limits when the Tribal member is engaged in tribal hunting, fishing, or gathering activities. Forest Service law enforcement has coordinated with Tribal law enforcement to enforce the MOU and deal with any protests by tribal or non-tribal members.

### □ Nez Perce Tribe/Columbia River Inter-Tribal Fish Commission:

The Nez Perce Tribe, as in previous years, assisted the Forest with cultural awareness, recruitment, and training activities. This assistance was of value in helping diversify the workforce and accomplish resource management objectives. The Nez Perce Tribe is sponsoring a young horseman's program called **Appaloosa**. This group will concentrate on learning packing skills through an outfitted educational trail ride program. The Forest Service is supporting this activity by teaching packing skills with both Forest and the 9 Mile Pack Train teams.

### □ State of Montana and State of Idaho (Air Quality):

The Forest joined the Montana/North Idaho Airshed Group in 1990. This group's objective is to minimize or prevent impacts from smoke in North Idaho and Western Montana, and to meet national ambient air quality standards when conducting prescribed burning. The Airshed Group was effective in meeting the national ambient air quality standards in 2001. The Forest follows daily smoke management advisories provided by the monitoring unit (Airshed) administrator and meteorologist.

### □ U.S. Army Corps of Engineers (COE):

The Corps of Engineers was consulted on projects involving wetlands and stream channels under provisions of Section 404 of the Clean Water Act.

### U.S. Fish and Wildlife Service (USFWS):

The Fish and Wildlife Service provided informal consultation support and/or concurrence on biological assessments under the Endangered Species Act on biological assessments for listed and proposed species on the Forest. In addition, the Fish and Wildlife Service provided technical assistance and support in the development of previous year conservation assessments and strategies for several species found on the Nez Perce National Forest. This data will be provided for a statewide repository of information related to wolf, peregrine falcon, bald eagle, grizzly bear, Canada lynx, and bull trout recover efforts. Fish and Wildlife Service scrutiny and processes required by law at times have the potential to further complicate and temporarily delay Forest activity decision processes.

### □ University of Idaho:

Each year the Forest and University of Idaho cooperate on weed management projects involving remote sensing of weeds; vegetation and biocontrol-agent monitoring; revegetation of weed-infested sites; and other research opportunities such as McComas Meadows.

### Part D Other Monitoring

This section addresses monitoring information that is not identified as a requirement in the Nez Perce National Forest Plan (Table V-1). The Forest feels this information is important to monitor as part of Forest Plan implementation.

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### NEZ PERCE NATIONAL FOREST

### ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

### Discussion:

The Architectural Barriers Act (ABA) of 1968 requires that all public buildings, facilities, and programs funded in whole or part with federal funds be accessible to and usable by physically disabled person. Section 504 of the Rehabilitation Act of 1973, as amended in 1978, states, "No otherwise qualified handicapped individual in the United States, shall solely by reason of his handicap, be excluded from the participating in, be denied the benefits of, or be subject to discrimination under any program or activity conducted by federal financial assistance or by any Executive Agency." The Americans with Disabilities Act (ADA) of 1990 provides standards – even when no federal funds are involved – for addressing discrimination against individuals with disabilities in employment, transportation, telecommunications, and services operated by private entities.

In 1991, the Nez Perce Forest Human Resources Team identified the need to evaluate accessibility of Forest facilities to people with disabilities. In June 1991, a survey was initiated using the newly developed Forest Service accessibility survey tool to determine the accessibility of Forest campgrounds/picnic areas. In addition, the need was identified to evaluate Forest Service facilities. A special emphasis program was created in 1992 to deal with issues concerning people with disabilities. During the initial monitoring stages of facilities we realized the need for TDD (Telecommunication Devices for the Deaf) to allow better communication with our publics. TTDs have been installed in five district offices and the Forest Headquarters. To access these phone lines, use the following phone numbers:

Forest Headquarters	(208) 983-2280
Salmon River Ranger District	(208) 839-2328
Clearwater Ranger District	(208) 983-0696
Moose Creek Ranger District	(208) 926-7725
Red River Ranger District	(208) 842-2233

### General Description of the Different Levels of Accessibility (A Design Guide/Universal Access to Outdoor Recreation)

Accessible/Easy	Moderate	Difficult
The general level of expected	The general level of expected	The general level of expected
access to elements and spaces	access to elements and spaces	access to elements and spaces
integrated into developed	integrated into moderately	integrated into lesser developed
recreation sites or portions of sites.	developed recreation sites or	recreation sites or potions of sites.
These are typically in: urban/rural	portions of sites. These are	These are typically in: semi-
settings; at sites managed to	typically in: roaded natural	primitive settings; at sites managed
provide urban/rural recreation	settings; at sites managed to	to provide semi-primitive settings; at
experiences; or at sites managed	provide roaded natural recreation	sites managed to provide semi-
to provide an easy level of	experiences; or at sites	primitive recreation experiences; or
accessibility as defined by these	management to provide moderate	at sites managed to provide difficult
guidelines.	level of accessibility as defined by	level of accessibility as defined by
	these guidelines.	these guidelines.

### Monitoring Results:

### Mobility Accessibility by Accessibility Levels

Facility	Easy/Accessible	Moderate	Difficult
Fish Creek Pavilion 1994 100 People	Will accommodate 75 people	Will accommodate an additional 25 people	0
Fish Creek Campground Sites: 11 total	9 campsites	2 campsites	0
Blackerby Picnic Area Sites: 2 total	0	2 picnic sites	0
Castle Creek Campground Sites: 9 total	0	8 campsites	0
South Fork Campground Sites: 9 total	6 campsites	2 campsites	1 campsite
Slims Camp Campground	0	0	Accessible at this level*
Selway Falls Campground	0	0	Accessible at this level*
Selway Fish Pond	Accessible at this level		
O'Hara Bar Campground Sites: 32	0	5 campsites	10 campsites
Spring Bar Campground Sites: 17	0	6 campsites	3 campsites
Allison Creek Picnic Area Sites: 2 total	0	0	1 picnic site
Wildhorse Campground	0	0	Accessible at this level*
Florence Cemetery			Accessible at this level*
McAllister Picnic Area			Accessible at this level*
Johns Creek Trailhead			Accessible at this level*
Cougar Creek Trailhead			Accessible at this level*
Trapper Creek Trailhead			Accessible at this level*
14 Mile Tree Trailhead			Accessible at this level*
Rocky Bluff Campground			Accessible at this level*
Meadow Cr. Campground			Accessible at this level*
Nelson Creek Campground			Accessible at this level*
Red River Campground			Accessible at this level*
Wild Horse Campground			Accessible at this level*
Johnson Bar Campground			Accessible at this level*
CCC Campground			Accessible at this level*

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Facility	acility Easy/Accessible		Difficult
Sing Lee Campground			Accessible at this level*
Iron Phone Junction			Accessible at this level*
Leggett Creek			Accessible at this level*
5-Mile Pond			Accessible at this level*
Slate Creek Ranger District Office	Accessible at this level		
Clearwater Ranger District Office	Accessible at this level		
Nez Perce National Forest Headquarters Office	Accessible at this level		
Red River Ranger District Office	Accessible at this level		
Moose Creek Ranger District Office	Not Accessible at this level	Not Accessible at this level	Not Accessible at this level
Elk City Ranger District Office	Accessible at this level		

\*Depending on weather

### **Evaluation of Monitoring Results:**

The Forest Headquarters and all district offices (except the Moose Creek Ranger District building at Fenn Ranger Station) are accessible to everyone. Moose Creek and Selway Ranger Districts have combined at the historic Fenn Ranger Station and are in the planning stages for providing accessible services there. A preliminary design was completed in 1996 for a new building at the site that would provide accessible offices and visitor services. That project is the number one priority for Capital Improvement funding on the Forest. It is anticipated that contract for construction will be awarded in FY 2002.

A triplex apartment building, our first fully accessible residences for employees, was completed at the Elk City Ranger Station in 1996. An accessible family housing duplex is also planned at the Elk City Ranger Station. It is the Forest's number three priority for Capital Improvement funding, and is scheduled for fiscal year 2003. Plans are on file for renovating a family residence at the Fenn Ranger Station for accessibility and work has begun on conceptual plans for renovating a bunkhouse and a family residence for accessibility at each ranger station. This work is prioritized on the Forest's NFFA work planning/funding list. Renovation will be undertaken when a need arises or as other funding becomes available; whichever comes first.

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### ENVIRONMENTAL ANALYSIS ACCMPLISHMENTS RELATED TO TIMBER

### Monitoring Results

The following table and discussion summarize **forest supervisor authority environmental analysis accomplishments** between FY 1988 and FY 2001. Beginning with FY 1993, **district ranger authority environmental analysis accomplishments** are also included.

Fiscal Year	Number of Decisions	Included Number of Sales	Total Acres Analyzed	Proposed Harvest Acres	Average Harvest Volume (MMBF) per Timber Sale	Proposed Harvest Volume (MMBF) <sup>1</sup>
1988	3	3	24,400	1,662	9.0	27.0
1989	8	15	164,480	5,908	6.8	102.1
1990	2	7	38,296	4,677	6.0	42.1
1991	3	11	81,964	6,164	8.0	88.5
1992	1	1	4,034	351	10.4	10.4
1993	5	5	25,716	2,461	4.1	20.5
1994	5	35	11,230	319	0.04	1.3
1995	9	11	6,730	386	0.4	4.1
1996	8	13	11,480	1,160	0.9	12.1
1997	4	6	45,775	4,509	3.26	22.3
1998	3	3	17,075	4,675	4.44	13.3
1999	2	2	4,553	362	1.3	2.6
2000	1	1	18,000	340	1.6	1.6
2001	1	1	9,750	1,055	9.5	9.5
14 year average	3.8	8.1	32,954	2,431	3.1	26.7
Total	53	114	461,361	34,029		356.9

### **Evaluation of Monitoring Results**

Many National Environmental Policy Act (NEPA) documents require more than one year to complete. This results in high variability from year to year with respect to the number of decisions and acres analyzed. During FY 2001, analysis was ongoing for two other timber output related documents.

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### NOXIOUS WEED MANAGEMENT

Noxious weeds and invasive exotic plants are a rising concern on federal land across the western United States. Many invasive exotics can invade healthy ecosystems, displace native vegetation, and affect species diversity and wildlife habitat. Widespread infestations may lead to soil erosion, reduce quality of recreation for visitors, and threaten the long-term viability of rare plants. Invasive exotics have been identified as a major threat to our native biodiversity.

The Nez Perce National Forest continues to implement a proactive management program for noxious weeds. The program is an integrated approach to managing the weeds on the Forest and includes education/awareness; inventory; prevention/early detection; treatment, and monitoring. The program is integrated with Idaho County Weed control and is based on a strong prioritization process.

 $<sup>^{\</sup>rm 1}$  Proposed harvest volume figures in this table are different than those exhibited on Table 1 because of rounding off of numbers.

Management priorities for the Forest are:

- Prevent the establishment of potential invaders;
- The eradication of new invading noxious weeds;
- The control of satellite infestations including the treatment of transportation corridors and areas of concentrated human activities; and
- The containment of large established infestations.

The noxious weeds of greatest concern on the Forest continue to be dyer's woad; rush skeletonweed; yellow starthistle; diffuse knapweed; Russian knapweed; toothed spurge; leafy spurge; sulfur cinquefoil; spotted knapweed; Scotch thistle; orange and yellow hawkweed; and common crupina.

In Idaho, the Forest Service restricted the use of hay and feed to only those products that were certified weed seed free or weed free, as part of a statewide prevention program. The Forest continued to work with Idaho County to ensure that a local supply of certified products were available. Machinery and equipment are washed as part of timber sale and equipment contracts in order to prevent the spread of weed seed.

During the FY 2001 season, district and Forest personnel worked with user groups and interested parties to identify and highlight the risks of invasive exotic plants. District personnel led field trips to review infestation and risk levels in sensitive areas such as wilderness and along Wild and Scenic rivers. Displays were set up at the Idaho County Fair to educate forest users of the risks of weed invasions. Road signs have been placed on main portals to alert users of the need for certified hay. Many user groups were contacted to discuss the risk of weed invasion to their interest areas.

Each district has a noxious weed coordinator who directs inventory, control, and monitoring activities. Noxious weeds were addressed in analyses for ground disturbing or habitat altering activities. Weed susceptibility was modeled in watershed and subbasin assessments.

The Forest used a variety of tools to treat areas during the FY 2001 field season. Weeds were treated by the release of biological control agents, manual pulling of isolated infestations, mowing, seeding of disturbed sites, and herbicides. Volunteer groups were active in manual control of spotted knapweed along the beaches of the Wild and Scenic sections of the Salmon River. Bio-control insects were released as treatment for yellow starthistle and spotted knapweed. The treatments are consistent with the estimated level outlined in the Forest Plan.

The Forest is involved in the implementation of the Salmon River Weed Management Area. The management area encompasses 500,000 acres in the lower Salmon River Canyon where a collaborative plan has been developed between Idaho County, private landowners, and federal/state land management agencies. The intent of the weed management area is to bring together those responsible for weed management within the Salmon River drainage, develop common management objectives, facilitate effective treatment, and coordinate efforts along logical geographic boundaries with similar land types, use patterns, and problem species. The result of this effort is the integration of the Forest weed program with the county and state efforts.

A similar effort is ongoing in the Clearwater River Basin. The Forest is part of a coordinating committee of county, federal, state, and private representatives. The committee was established to coordinate weed management activities across the entire Clearwater basin. The committee finalized the strategic weed management plan for the Clearwater basin. The plan will require the cooperators to realign their individual weed management priorities to accomplish basin priorities and to ensure that the work is coordinated across the watershed. The Forest program in the Clearwater drainage will become increasingly integrated with the county, state, and other federal agency efforts.

The Forest was involved in implementing weed treatments in the Frank Church River of No Return Wilderness. An environmental impact statement and weed treatment decision were completed in the summer of 1999, with treatment beginning in FY 2000.

To assist in the early detection and the long term monitoring of yellow starthistle, spotted knapweed, leafy and toothed spurges and rush skeletonweed, the Forest received a grant from the Regional Partnership Program to use hyperspectral images to detect small infestations of weeds with low canopy cover along the Salmon River Canyon. The project includes the University of Idaho, Idaho County, Idaho Department of Agriculture, and the Bureau of Land Management. New remote sensing technology offers the opportunity to greatly improve on the limited success of past remote sensing projects in the detection of weeds. Hyperspectral imaging uses detailed weed reflectance to identify species based on specific spectral signature files. Low-level flights with a fixed-wing aircraft gathered digital reflectance data with a "Probe" sensor along a five-mile wide flight line from the mouth of the Salmon River to the confluence of the South Fork of the Salmon River, covering approximately 400,000 acres along 125 river miles. The University of Idaho is completing image classification and accuracy assessment. The University would provide digital image files, mosaic maps, classification, and final report of the entire project area to the partners. Classification of the images is in progress and the project will be completed in the fall of 2001.

The Forest, working with the University of Idaho, Forest Health Protection Group, and the Nez Perce Tribe Bio-control Center, is monitoring bio-control agents for yellow starthistle in the Salmon and Clearwater basins. This work includes the distribution, release, and monitoring of five different insects that have been approved for release. It also incorporates vegetation monitoring as part of the management of the release sites.

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### **RESEARCH NEEDS**

The following research needs have been identified during implementation of the Forest Plan. They will be recommended to the Regional Forester for inclusion in the Regional research program proposal

 <u>The Elk Guidelines Habitat Suitability Index</u> (HSI) model represents a composite of factors and variables affecting elk behavior from all over the west. There is a need for cooperative research to help refine the Northern Idaho Elk Guidelines H.S.I. Model so variables characteristic of Northern Idaho will be more properly represented and the model better tailored to local conditions. **Status:** An interagency team of elk habitat technical specialist comprised of biologists from Idaho Department of Fish and Game, Nez Perce and Clearwater National Forests, and the Nez Perce Tribe, organized through the "Venture 20" effort, have completed a technical review and proposed edits/improvements to the existing <u>Guidelines for Evaluating and Managing Summer elk habitat in Northern Idaho</u> (Leege 1984). A draft of this updated proposal titled, "Interagency Guidelines for Evaluating and Managing Elk Habitats and Populations in Central Idaho" (Servheen, 1997; Wildlife Bulletin No. 11) was prepared. The 1997 draft proposal resulted in adjustments to the 1984 model, including: removal of the security area variable, incorporation of trails into access calculations, addition of elk vulnerability model, and other less significant changes. An on-forest interdisciplinary review of these draft 1997 updates to the 1984 model resulted in the preliminary conclusion that a significant Forest Plan amendment may be required prior to forest-wide application. Rationale behind this preliminary conclusion included the following:

- a. Replacing the Nez Perce Forest Plan's Appendix B implies a change to Forest Plan direction.
- b. Cumulative effects of implementing the 1997 version have not been evaluated or publicly displayed.
- c. Elk and elk habitat management are significant public issues on the Forest.
- d. Public input from recreation, hunting, and motorized user publics relative to the 1997 changes have not been solicited or reviewed.
- e. The 1984 elk model in Appendix B of the Forest Plan did not address application of an elk vulnerability model. Site-specific incorporation and adoption of the 1997 adjustments to the 1984 elk model will be encouraged for application on a site-by-site basis following appropriate NEPA, but Forest-wide application of the 1997 version will require incorporation into the Forest Plan Revision Process. <u>2001 Update</u>: The Forest Plan Revision process has not formally been initiated with a Notice of Intent to do the EIS as of this date.

# 2. <u>Moose winter range</u> questions that previously needed to be addressed have diminished in importance in recent years:

**2001 Update:** With dramatic changes in both the extent and methodologies of timber harvesting used on national forests throughout the U.S. in recent years, most of the questions and concerns pertaining to maintenance of moose/yew habitats have disappeared. Due to these dramatic changes, the driving need to answer these questions has fallen in priority and no research is currently pending to address these issues at this time.

# 3. The <u>consequences of repeated burning</u>, and of maintenance of Forest ecosystems in prolonged seral brush stages, once needed to be evaluated.

**2001 Update:** Dramatic shifts in forest management philosophy and recognition of soil maintenance needs as well as the practices of managing to emulate "natural disturbance regimes" and "historical ranges of variability" have begun to replace outdated approaches aimed at maintaining seral brush stages on a given site indefinitely. For this reason, the practice of repeated intensive burning for such purposes is used less and as a result, levels of concern over this practice are declining. No research is pending at this time.

# 4. Determining the relative effectiveness of <u>fertilization compared to burning</u> for improving wildlife habitat was previously needed.

<u>2001 Update:</u> Fertilization costs versus those of prescription burning are comparatively high. Dramatic reductions in appropriated funds and other revenue sources in recent years have placed greater emphasis on cost-effectiveness of land treatments. For this reason, the practicality of using fertilization as an economical approach to habitat improvement has virtually been eliminated. No research is planned or pending at this time.

### 5. Determine and define corridor attributes needed to link old growth stands.

**2001 Update**: Dramatic changes in forest management philosophy and practices adopted in recent years have, for all practical purposes, eliminated the application of broad-scale clear-cut and burn treatments which tend to isolate forest stands and fragment overall landscape conditions. Current philosophy emphasizes consideration for maintaining and increasing late-seral forest conditions and arrangement of habitats including connectivity and habitat continuity, such that the need to link old growth stands is fast becoming a declining issue in forest issues of the future. For this reason, no research is planned or pending at the local scale at this time.

6. <u>Natural stand dynamics and disturbance regimes for riparian habitat types</u> are poorly described. Silviculturists need to be able to predict effects of timber management on stand regeneration, competition, future stand composition, and insect and disease patterns, as well as factors affecting riparian and stream function including shading, bank stability, and large woody debris inputs. Methods need to be developed to monitor the effects of timber harvest and other activities on riparian areas.

**2001 update:** These research needs are being addressed to some degree with local investigations of patterns of fire and modeled watershed response in the Selway River Subbasin. Work on the Bitterroot Ecosystem Management Project is being done that may also address these issues, but research findings may need local calibration.

7. <u>Habitat relationships and limiting factors for most sensitive and federally listed</u> <u>species</u> (plant and animal) are poorly understood. Research is needed to better define critical habitat components for these species and risk posed by Forest management activities.

**Accomplishment Status:** Minimal research on habitat relationships of sensitive and federally listed plants has occurred over the last few years. Progress is slow because the research must be conducted across multiple forests, agencies and dispersed across an ever-increasing number of sensitive and imperiled species. Idaho Conservation Data Center has begun modeling potential habitat for a few rare plants in Idaho. There is opportunity in the near future for National Forests to fund work on habitat relationships of rare plants.

8. <u>Watershed and reach response to natural fire disturbance and rates of recovery</u> are not well described in watershed models currently in use. Research is needed to describe debris torrent and water yield effects on channel attributes, and watershed recovery rates in terms of temperature, sediment and substrate condition, and channel morphology.

**2001 update:** These remain critical unmet research needs. Forest level studies have been in place since the 1988 fires and provide some information. Rocky Mountain Research Station has proposed studies for FY 2002-2003 to address this need.

# 9. There is a lack of published data concerning the <u>effects of operating a suction dredge</u> <u>in streams occupied by threatened, endangered, and sensitive aquatic species</u>.

# 10. An accurate way of <u>quantifying the short-term and long-term effects of road</u> <u>decommissioning on sediment production</u> needs to be developed.

**2001 update:** Research coordinated by the Rocky Mountain Research Station has been proposed in Horse Creek to evaluate the effects of road decommissioning on sediment production, channel morphology, water yield and stream macro invertebrate populations. NEPA analysis is scheduled for 2001 and decommissioning for 2002 or 2003, with sampling through 2005 or 2006. Other road decommissioning projects are being monitored at the forest level for changes in stream cross-sections and substrate above and below restored stream crossings.

### Accomplishment of Research Needs

**Riparian Disturbance Regimes:** In 1995-1997 detailed fire history mapping and field sampling occurred in the wilderness portion of the Selway River basin. These data are being analyzed to characterize natural fire disturbance patters in riparian areas at watershed and reach scales.

**2001 update:** This research has described watershed scale patterns of fire disturbance and sediment and water yield response, but no long-term field sampling has been done. Analysis scheduled for 2001 will investigate reach level patterns of fire disturbance in reaches stratified by fish habitat potential and reach response units.

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### PLAN AMENDMENTS

Amending the Nez Perce National Forest Plan is a normal process of improving our ability to care for the land. The need to amend the Plan was anticipated at the outset. Twenty-five amendments and one revised amendment have been issued.

Following are summaries of those amendments made to date. No amendments were made to the Forest Plan in FY 2001. A copy of any amendment(s) can be obtained by contacting the Nez Perce National Forest's Supervisor's Office.

### Amendment #1:

Clarifies our intent to protect potential Wild and Scenic Rivers upon their inclusion into the National Wild and Scenic Rivers system, by providing more detailed forest-wide standards.

Proposed changes in the management standards were developed following guidance contained in the Wild and Scenic River Evaluation section of the Forest Service Land and Resource Management Planning Handbook (FSH 1909.12, Chapter 8). [10/88]

### Amendment #1 (Revised):

Revised Forest Plan Amendment #1 is exactly the same as the original amendment except that the following statement has been removed. The amendment was necessary to settle and appeal of Amendment #1. [1/91]

"Boundaries may include adjacent areas needed to protect the resources or facilitate management of the river corridor."

### Amendment #2:

Clarifies the Forest's definition and management of motorized recreation on the Nez Perce National Forest. [10/88]

### Amendment #3:

Modifies standards listed in Chapter II (Forest-wide Management Direction) and Chapter III (Management Area Direction). Clarification is provided in changes to the minerals section of Chapter VI (Summary of the Analysis of the Management Situation) and the glossary and monitoring items.

The specific standards modified are those relating to minerals, wildlife, fish, and riparian area management; and to provide clarification that will not alter the multiple use goals and objectives as identified in the Forest Plan.

The need for changes and clarification in management standards was the result of negotiations with the Independent Miners Association's appeal of the Nez Perce National Forest Plan. An interdisciplinary team developed the settlement agreement that addressed then appellant's concerns and a proposal for correcting the Plan. [3/89]

### Amendment #4:

Modifies standards listed in Chapter II (Forest-wide Management Direction), modifies the visual resource standards in Chapter III (Management Area Direction), and modifies specific monitoring requirements in Forest Plan Appendix O dealing with visual resource management.

The need for changes and clarification in management standards was the result of environmental analysis of proposed timber sales and road construction in the Wing Creek-Twentymile area. During the comment period of the Wing Creek-Twentymile Draft Environmental Impact Statement, concern was expressed on conflicting Forest Plan language pertaining to visual resource management. An interdisciplinary team was used to analyze the concerns and develop a proposal for correcting the Forest Plan. [3/89]

### Amendment #5:

Corrects errors displayed in the Nez Perce National Forest Plan Appendix A, Forest Fishery/Water Quality Direction by Prescription Watershed. These objectives provide management direction in terms of the maximum estimated increase in sediment over baseline conditions that can be approached or equaled for a specific number of years per decade.

Some of the changes are planning errors made in identifying sediment yield and entry frequency guidelines. Site-specific analysis and stream surveys have also revealed that some streams were incorrectly identified as not supporting anadromous fish. The errors were identified through environmental analysis of proposed timber sales and road construction. An interdisciplinary team was used in identifying the needed changes and proposing the corrections. [3/89]

### Amendment #6:

Corrects errors in Forest Plan Chapter II (Forest-wide Management Direction), Chapter III (Management Area Direction), Chapter V (Implementation), Chapter VII (Glossary), and Appendix A (Fishery/Water Quality Direction).

The corrections made in this Forest Plan amendment provide clarification that will not alter the multiple use goals and objectives as identified in the Forest Plan.

An error was identified through environmental analysis of a proposed timber sale and associated road construction and habitat improvement project. Forest Plan Appendix A describes current fishery habitat quality in the West Fork of Red River (Prescription Watershed 17060305-04-18) as 50 percent of potential habitat quality. The West Fork of Red River is in a pristine natural condition. This watershed is roadless and no management activities are known to have occurred in either the watershed or the stream. The stream is, therefore, in a pristine, natural condition and it is appropriate to display it at 100 percent of potential habitat quality.

The Forest Interdisciplinary Monitoring Team identified additional typographical errors in the Forest Plan. This Forest Plan amendment includes the correction of those errors. [7/89]

### Amendment #7:

Clarifies language founding the following sections:

- Chapter II (Forest-wide Management Direction)
- Chapter V (Implementation)
- Chapter VI (Summary of the Analysis of the Management Situation)
- Appendix O (Forest Plan Monitoring)

The specific items modified provide clarification that will not alter the multiple use goals and objectives as identified in the Forest Plan.

The need for changes and clarification in management standards was the result of negotiations with the Nez Perce Indian Tribe on their appeal of the Nez Perce National Forest Plan. An interdisciplinary team was used in developing the settlement agreement that addressed the appellant's concerns and developed a proposal for correcting the Forest Plan. [1/90]

### Amendment #8:

The purpose of the Forest Plan Amendment #8 is to clarify language in Appendix O (Forest Plan Monitoring Requirements).

During this past year the Forest Interdisciplinary Monitoring and Evaluation Team identified some items in the Forest Plan Monitoring Requirements Appendix that need correction or clarification.

These items focus on fish and wildlife monitoring. Specifically, the changes relate to forage production, wildlife population trends, and fisheries/watershed monitoring station costs.

The corrections made in this Forest Plan amendment provide clarification that will not alter the multiple use goals and objectives as identified in the Forest Plan. [1/89]

### Amendments #9 and #10:

These amendments deal with management practices specific to the Cove and Mallard Timber sales as described in the Final Environmental Impact Statements for those sales. Amendment No. 9 was formally adopted in the Mallard Record of Decision, and Amendment No. 10 was formally adopted in the Cove Record of Decision. Both of these amendments correct oversights in the Forest Plan.

These two amendments apply only to the timber sales analyzed in the Cove and Mallard Environmental Impact Statements. They do not apply to other timber sales on the Forest.

The two amendments will allow clear-cutting and sanitation/salvage harvesting within Management Areas 12 and 17. (11/90)

### Amendment #11:

Forest Plan Amendment No. 11 makes adjustments in the Forest-wide monitoring program and updates the fish/water quality objectives in Appendix A to the Plan. The Forest Interdisciplinary Monitoring Team in the Nez Perce National Forest Monitoring and Evaluation Report recommended the changes in the monitoring program for Fiscal Year 1989; the objective was to make the program more comprehensive. The revised fish/water quality objectives are based on recent stream surveys. Specific changes in both the monitoring program and the fish/water quality objectives are listed in the Decision Memo for Amendment No 11. (1/91)

### Amendment #12:

Amendment 12 makes minor changes to the Wall Creek Municipal Watershed direction (Management Area 22) contained in the Nez Perce Forest Plan. These changes relate to improving the range of management practices identified in the Forest Plan, and specifically to items such as notifying the water district if a fire occurs in the watershed and taking special precautions with machinery and chemicals. (2/91)

### Amendment #13:

Amendment 13 brings the Plan into compliance with legal requirements and Forest Service directives dealing with animal damage control. It should be noted that the amendment does not authorize any specific projects. (4/91)

### Amendment #14:

This (3/91) amendment would partition the allowable sale quantity (ASQ) by separately showing the ASQ that came from inventoried Roadless areas and roaded areas. Thirteen Forest Plans in the Northern Region were amended. The decision was appealed to the Chief of the Forest Service who affirmed the decision. The Secretary of Agriculture opted to review the Chief's appeal decision and reversed the decision in October 1991, thereby vacating and voiding Amendment 14 of the Nez Perce Forest Plan.

### Amendment #15:

Amendment 15 amends the Frank Church-River of No Return Wilderness Management Plan and the Forest and Land Management Plans for the Bitterroot, Boise, Challis, Payette, Nez Perce, and Salmon National Forests. The amendment changes wording in the Wilderness Management Plan related to reducing the storage of items and removal of plumbing fixtures from the wilderness. The amendment only modifies the schedule of implementation. (6/91)

### Amendment #16:

Amendment 16 adopts programmatic changes in management direction for the Selway-Bitterroot Wilderness. These changes should enable wilderness managers to better meet both the letter and the intent of the Wilderness Act. (2/92)

### Amendment #17:

Amendment 17 allows salvage timber harvest within Management Area 20 (old growth wildlife habitat) following the Scott Fire. Analysis showed that salvage harvest would help to speed up the achievement of old-growth vegetative characteristics in the burned area. This amendment is specific to the Scott Fire salvage sale and will not apply to other areas on the Forest. (4/93)

### Amendment #18:

Amendment 18 brings the Forest Plan into compliance with a court order that addresses outfitter and guide operations in the Frank Church-River of No Return Wilderness. (7/94)

### Amendment #19:

Amendment 19 adds more specific management direction for vegetation in the Selway-Bitterroot Wilderness General Management Direction. It establishes goals, objectives, standards and guides, and monitoring elements for vegetation within ecosystem management principles. It addresses such issues as: noxious weeds, rare plant protection, vegetative diversity, and management of pack and saddle stock. (2/95) [Note: Based on negotiations with appellants, the decision was rescinded in May 1995. A new amendment/decision, which provides additional clarification, is expected in FY 95.]

### Amendment #20:

The Nez Perce Forest Plan was amended by the Chief of the Forest Service to incorporate an interim strategy for managing anadromous fish producing watersheds (PACFISH). (2/95)

### Amendment #21:

This was a project specific amendment based on the analysis contained in the Hungry-Mill Final Environmental Impact Statement. The amendment changed the summer elk habitat potential objective from 50 percent to 25 percent on 2,838 acres within the Hungry-Mill analysis area. (3/97)

### Amendment #22:

This was a project specific amendment based on the analysis contained in the Berg Timber Sale Environmental Analysis. The amendment allows timber harvest within Management Area 20 (old-growth wildlife habitat) in order to improve and maintain the long-term sustainability of the ponderosa pine communities in designated areas of the Berg Timber Sale. The amendment is only valid for the contract life of the timber sale and does not apply to future actions in this area or elsewhere on the Forest. (1/97)

### Amendment #23:

This amendment corrects summer elk analysis units and objectives that were mismatched in the original Forest Plan. (7/97)

### Amendment #24:

This was a project specific amendment based on the analysis contained in the Hungry-Mill Final Environmental Impact Statement. The amendment updated Forest Plan Appendix A information for several watersheds in the Hungry-Mill analysis area to account for new information on the species of fish that exist in these watersheds. (8/97) **The amendment was challenged in court and subsequently withdrawn in (5/98)** 

### Amendment #25:

This was a project specific amendment based on the analysis contained in the Middle Fork Final Environmental Impact statement. The amendment updated forest Plan Appendix A information for three watersheds in the Middle Fork analysis area to account for new information on the species of fish that exist in these watersheds. (10/97)

### Amendment #26:

This was a project specific amendment based on the analysis contained in the Middle Fork Final Environmental Impact Statement. The amendment allows timber harvest within Management Area 20 (old-growth wildlife habitat) in order to improve and maintain the long-term sustainability of the ponderosa pine communities in unit F Middle Fork Timber Sale. The amendment is only valid for the contract life of the timber sale and does not apply to future actions in this area or elsewhere on the Forest. (10/97)

### Amendment #27:

This was a project specific amendment based on the analysis done for the East Meadow Creek Prescribed Fire Project. The analysis identified the need to allow short term, human-caused, fire related sediment increases that approximate natural variations in the stream. The amendment changes fish habitat and water quality objectives listed in Appendix A for 8 watersheds. The amendment is only valid for the life of the prescribed fire project and does not apply to future actions in this area or elsewhere on the Forest. (2/99)

### AUTHORS/EDITORS

The following individuals contributed to the development of the Monitoring and Evaluation Report for the Nez Perce National Forest for fiscal year 2001. Members of the Forest Interdisciplinary Monitoring Team are **highlighted in bold type**.

Name	Area of Expertise
Nick Gerhardt	Hydrology and Watershed
Mike McGee/	Timber
Leonard Lake	Range, Botany, and Noxious Weeds
Ihor Mereszczak	Minerals
Kris Hazelbaker	Silviculture, Insects, and Disease
Dave Green	Economics
Lois Geary	Budget and Finance
Randy Borniger, Laurie Doman	Recreation, Wilderness, Trails
John Fantini	Rivers
Cindy Schacher	Heritage Resources
Steve Harbert	Fire and Air
Pat Green	Ecology and Soils
Marci Gerhardt	Soils and Riparian
Dick Artley	Land Management Planning
Steve Blair	Wildlife
Scott Russell	Fisheries
Joe Bonn	Facilities
Paul Christensen	Disabled Persons Access
Daryl Mullinix	Lands and Special Uses
Laura Smith	Public Affairs
Monica McGee	Technical Support

The following monitoring program coordinators coordinated district review of the draft report. The district review involved appropriate staff and resource specialists.

Name	Unit
Bill Shields	Red River Ranger District
David Harper	Clearwater Ranger District

In addition, the following individuals reviewed the report:

Name	Area of Responsibility
Bruce Bernhardt	Forest Supervisor
Ihor Mereszczak	Staff Officer: Ecosystem Planning & Operations
Michael Cook	Staff Officer: Lands, Admin, Trails, Engineering, &
	Recreation
Kenneth Castro	Staff Officer: Fire Zone
Phil Jahn	Staff Officer: Watershed, Ecology, Biology, & Heritage
Randy Doman	Deputy Fire Staff Officer
Jack Carlson	District Ranger, Salmon River Ranger District
Darcy Pederson	District Ranger, Clearwater Ranger District
Joe Hudson	District Ranger, Moose Creek Ranger District
Kevin Martin	District Ranger, Red River Ranger District

### APPROVAL

I have reviewed the annual Forest Plan Monitoring and Evaluation Report for fiscal year 2001 for the Nez Perce National Forest that was prepared by the Forest Interdisciplinary Team. I am satisfied that the Monitoring and Evaluation effort meets the intent of both the Forest Plan (Chapter V) and 36 CFR 219. I have also considered the recommendations of the Interdisciplinary and Leadership Teams on proposed changes to the Forest Plan and will process the necessary Amendments after appropriate notification.

This report is approved:

/s/ Bruce E. Bernhardt BRUCE E. BERNHARDT Forest Supervisor June 20, 2002 DATE

### APPENDIX

### Status of Action Items Identified in Prior Years

The action items shown below were identified between Fiscal Years 1988-1998. The current status of action to resolve these concerns is summarized below. Action items with an "incomplete" or "ongoing" status will be included in next year's report, together with an update of the resolution status. Action items that are "complete" or "resolved" will not be repeated in future reports.

ACI	TION ITEM RELATED TO TIMBER
Item #1	Continue to maintain expertise for the remeasurement of permanent growth plots. The data from such plots will be used to help develop yield tables in the revised Forest Plan.
Fiscal Year Action Item identified:	Fiscal Year 1995
Current Status:	Ongoing
Discussion:	Progress is occurring as funding and personnel permit. This task remains a high priority on the Forest. The Regional Office is currently evaluating permanent plots region-wide to determine which should have continued measurement and which should not. This should reduce costs and duplication.

ACTION ITEMS RELATED TO WILDLIFE		
Item #1	The Forest needs to determine how fire or silvicultural prescriptions might be used to protect/restore low elevation pine or pine/Douglas fir designated old growth from stand replacing fire.	
Fiscal Year Action Item identified:	Fiscal Year 1993	
Current Status:	Ongoing	
Discussion:	Fuels reduction using prescribed fire sometimes preceded by mechanical thinning is now accepted management practice. More proposals are being developed, where needed, to put this into practice. Monitoring of biotic condition suitability and species responses in treated stands remains to be done in the longer term to validate associated habitat assumptions.	
Item #2	Concise snag identification and marking directions to timber marking crews must be included in marking guidelines. Consistent timber sale contract clauses (which do not contradict each other) are needed to help retain snags and trees for replacement snags.	
Fiscal Year Action Item identified:	Fiscal Year 1993	
Current Status:	Ongoing	

### ACTION ITEMS RELATED TO WILDLIFE

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Discussion:	Resolution of this issue will require greater attention and involvement by
	biologists and timber markers in the future. Site-specific decision-
	making involving reduction of safety hazards will often have to weigh
	competing values.

ACTION ITEMS RELATED TO RECREATION		
Item #1	Develop criteria for evaluating impacts of off-highway vehicle (OHV) use. Determine what is unacceptable change on a transportation system or land base as a result of these uses and user types.	
Fiscal Year Action Item identified:	Fiscal Years 1989-1991, 1994, and 1995	
Current Status:	Not completed	
Discussion:	Continued lack of funding and the low priority assigned to this task compared with other recreation related work has resulted in very little work in this area. The development of a systematic method to monitor off-road motor vehicle (ORV) use and impacts has not been a; top priority on the Forest. As a result, specific instances of detrimental effects of ORV use continue to be handled on a case-by-case basis. Recreation, particularly motorized recreation, continues to be used as a principle mitigator for timber harvest. This is having significant effects on the long-term potential for recreation use and opportunities on the Forest.	
ltem #2	Implement the national system called Infrastructure, which will be used to improve the gathering and documentation of visitor use information.	
Fiscal Year Action Item identified:	Fiscal Year 1994 and 1995.	
Current Status:	Ongoing	
Discussion:	The Nez Perce Forest has replaced the Recreation Infrastructure with Meaningful Measures. This is an ongoing database that will show what is needed to maintain the Forest's recreation and trail program.	
Item #3	Review and revise recreation opportunity spectrum (ROS) forest-wide, incorporate ROS analysis into all environmental analyses and develop a mechanism for updating ROS acreages in the database.	
Fiscal Year Action Item identified:	Fiscal Year 1994 and 1995.	
Current Status:	Incomplete	
Discussion:	The review, revision, and acreage updating of the Recreation Opportunity Spectrum (ROS) forest-wide was submitted as a projected proposal for ecosystem management funding. It was the third priority project submitted for recreation and was not funded.	
ltem #4	Establish a system of measurements for more precise monitoring of sites eligible to the National Register of Historic Places.	
Fiscal Year Action Item identified:	Fiscal Year 1994 and 1995.	

### ACTION ITEMS RELATED TO RECREATION

Current Status:	Ongoing
Discussion:	In accordance with the Region One Programmatic Agreement with the Idaho State Historic Preservation Officer, National Register of Historic Places (NRHP) eligible sites are currently being monitored before, during, and after the implementation of specific projects. This monitoring documents any site changes which may have occurred due to potential project related impacts, vandalism, or the forces of nature.
Item #5	Continue to replace substandard signs in the wilderness.
Fiscal Year Action Item identified:	Fiscal Year 1994.
Current Status:	Ongoing
Discussion:	The Forest is continuing to replace substandard signs in wilderness as funding levels allow.
Item #6	The Middle Fork of the Clearwater River Management Plan needs to be updated and the administration of scenic easements needs more emphasis.
Fiscal Year Action Item identified:	Fiscal Years 1994 and 1995.
Current Status:	Incomplete
Discussion:	There continues to be a need to update the Middle Fork of the Clearwater River Management Plan. A shared Scenic Easement Administrator position was established between the Nez Perce and Clearwater National Forests to provide consistent Wild & Scenic River easement administration on the Selway, Moose Creek, and Lochsa Ranger Districts.
Item #7	Formally adopt a new "roaded modified" Recreation Opportunity Spectrum (ROS) class for the Forest.
Fiscal Year Action Item identified:	Fiscal Year 1995.
Current Status:	Ongoing
Discussion:	Work continues in this area as funding allows.

ACTION ITEMS RELATED TO FISHERIES		
Item #1	Fish and water quality objectives for the South Fork of Clear Creek should be consistent with objectives for similar Chinook habitat on the Forest. Also, one-half mile of stream in the Clear Creek drainage does not have an assigned water quality objective.	
Fiscal Year Action	Fiscal Year 1990	
Item identified:		
Current Status:	Incomplete	
<b>Discussion:</b> This situation will be corrected through the Forest Plan amend		
	process. Other higher priority work has delayed progress on this amendment. Given recent budget reductions and the pending Forest	

ACTION ITEMS RELATED TO FISHERIES
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	Plan revision work already underway, it is unlikely that an amendment will be made before the revised Plan is complete
Item #2	Monitoring of fish habitat condition needs to be adequately funded,
	staffed, and given a higher priority for accomplishment.
Fiscal Year Action	Fiscal Years 1993 and 1994
Item identified:	
Current Status:	Ongoing
Discussion:	In FY 2000, the Forest will complete a workforce analysis in order to
	prioritize the work and match with existing and projected skills.

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ACTION I	TEMS RELATED TO SOIL AND WATER
Item #1	Additional work is needed to improve the quality of placer mining operations in some cases. The lack of specific mandatory "best management practices" is a limitation in achieving this.
Fiscal Year Action Item identified:	Fiscal Year 1994
Current Status:	Ongoing
Discussion:	Work continues as funding and personnel permit.
Item #2	Continued development of the NEZSED model and improvements in the reliability of observed sediment yield estimates are needed to improve future land management decisions.
Fiscal Year Action Item identified:	Fiscal Year 1994
Current Status:	Ongoing
Discussion:	The Forest is involved in efforts at the regional and national levels to assess and update sediment-modeling technology.
Item #3	To maintain soil productivity, water quality, and maintain viable populations of native species, increased emphasis needs to be given to accomplishing integrated landscape and site-specific assessments.
Fiscal Years Action Item identified:	Fiscal Years 1993 and 1994
Current Status:	Ongoing
Discussion:	In FY 1999, the Forest worked on two Ecosystem Analysis at the Watershed Scale: Slate Creek and Newsome Creek. Also, in FY 1999, the Forest worked on the second of 3 landscape assessments at the 4 <sup>th</sup> code HUC scale (750,000 – 1,000,000) acres in preparation for Forest Plan revision. This first landscape assessment covered the South Fork Clearwater River drainage. The second such landscape assessment, in the Selway River drainage, is to be completed in FY 2001. In FY 2000 work was begun on the Salmon River landscape assessment.
ACTION ITEMS RELATED TO SOIL AND WATER	
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Item #4	Analyze the effectiveness measures being taken to promote riparian recovery in McComas Meadows in light of the effects to the meadows of the 1995 storm event.
Fiscal Year Action Item identified:	Fiscal Year 1995
Current Status:	Ongoing
Discussion:	Meadow conditions were evaluated in 1996 and 1997. A restoration plan is being refined with implementation ongoing in cooperation with the Nez Perce Tribe.

## REFERENCES

The Nez Perce National Forest Headquarters can be contacted in regard to locating copies of the following cited material referred to in this report:

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