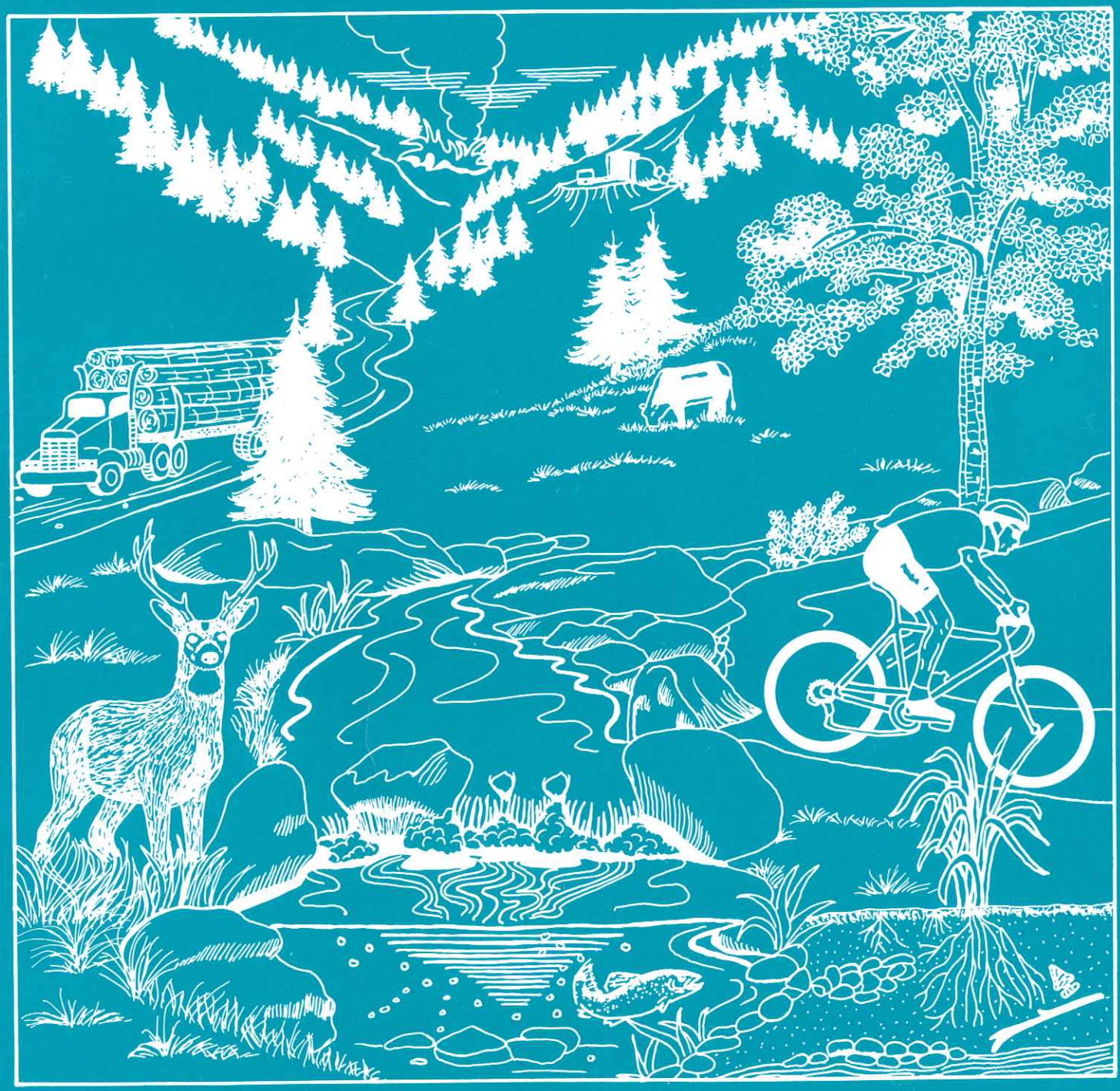
United States
Department of
Agriculture

Forest Service

Nez Perce National Forest Plan

SIXTH ANNUAL MONITORING AND EVALUATION REPORT



Fiscal Year 1993

INFORMATION REQUESTS/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
(208) 839-2211

Clearwater Ranger District
Route 2, Box 475
Grangeville, ID 83530
(208) 983-1963

Red River Ranger District
Box 23, Red River Route
Elk City, ID 83525
(208) 842-2255

Moose Creek Ranger District
P.O. Box 464
Grangeville, ID 83530
(208) 983-2712

Selway Ranger District
HC 75, Box 91
Kooskia, ID 83539
(208) 926-4258

Elk City Ranger District
Elk City, ID 83525
(208) 842-2245

Nez Perce National Forest Headquarters
Route 2, Box 475
Grangeville, ID 83530
(208) 983-1950

Forest Supervisor

June 1994

Dear Reader:

The Nez Perce National Forest Plan, released in October 1987, charts a new course for managing the Forest for the next 10 to 15 years. It is our contract with you, the people we serve, to manage the outstanding resources of the Nez Perce National Forest in an integrated manner so we can achieve a balance of uses.

The phrase "caring for the land and serving people" embodies the spirit of the Forest Service Mission. The spirited employees of the Nez Perce National Forest are committed to a deeply rooted land and service ethic. We strive to maintain ecosystem health and meet people's needs for uses, values, products and services, now and in the future.

We are six years into our Forest Plan implementation. We recognize that there are some changed conditions since 1987. Our Sixth Nez Perce National Forest Annual Monitoring and Evaluation Report highlights our progress.

We invite you to renew and comment on this sixth annual report, your ideas are important to us.

As always, we welcome you to work with us to improve our land stewardship responsibilities. Please feel free to call, visit, or write us anytime.

Sincerely,

Mike

MICHAEL KING
Forest Supervisor

Nez Perce National Forest

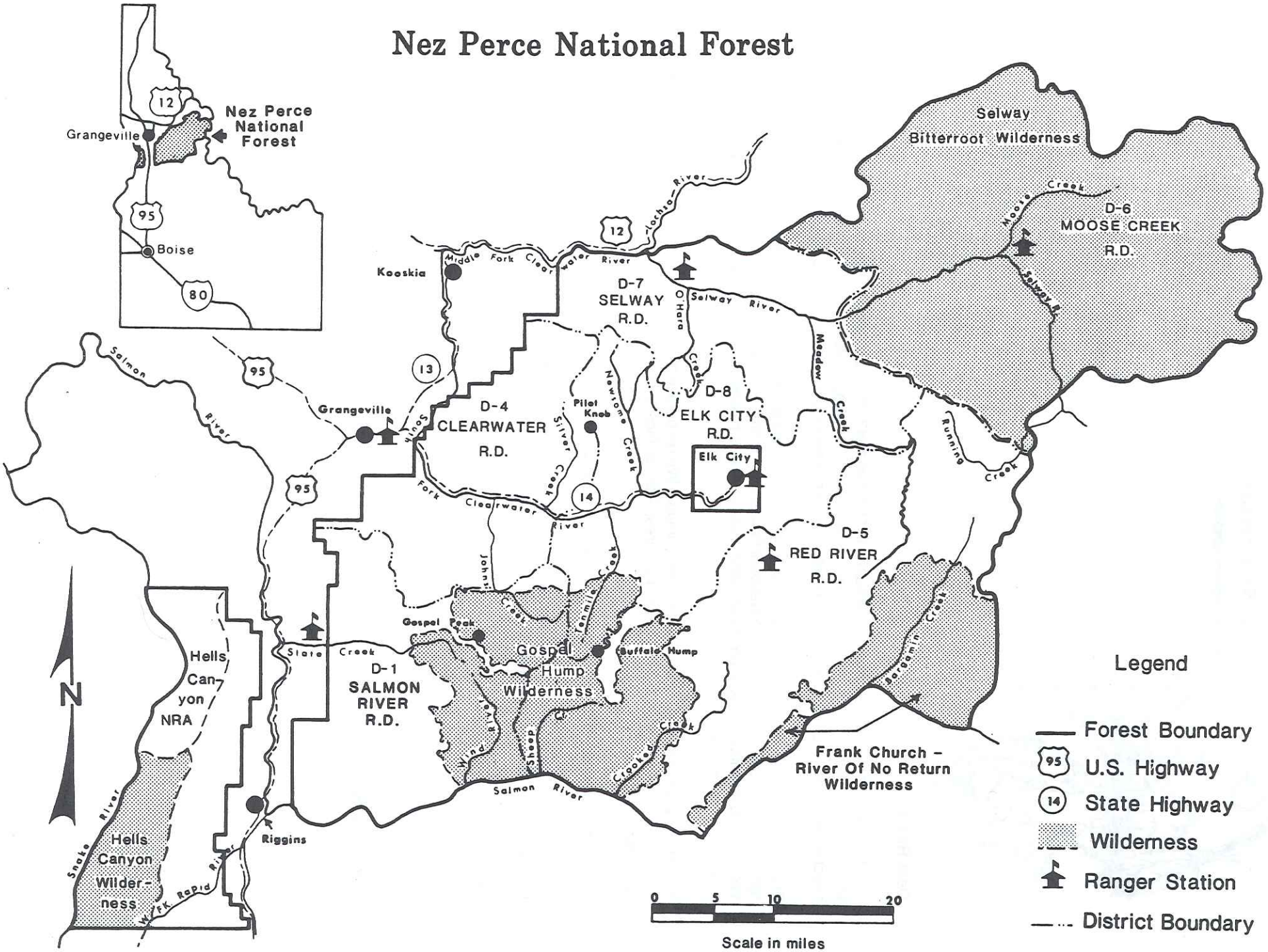


TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

TABLE OF CONTENTS (continued)

---PREFACE---

A SUMMARY OF THE FINDINGS FROM

THE DRAFT FIVE-YEAR FOREST PLAN REVIEW

Introduction

The Nez Perce National Forest Plan was adopted in October, 1987. This Fiscal Year 1993 Monitoring and Evaluation Report marks six years of Forest Plan implementation, monitoring, and evaluation.

Two major changes in forest planning direction have occurred since publication of the Fiscal Year 1992 Monitoring and Evaluation Report. On August 23, 1993, Regional Forester Dave Jolly informed Forest Supervisors that "the time has come to proceed with significant amendment or revisions of the Northern Region's Land and Resource Management Plans." The Regional Forester went on to emphasize that "we need to ensure ecosystem management principles are incorporated into this process."

When this direction was received, the five-year Forest Plan review required by the National Forest Management Act (NFMA) was well underway on the Nez Perce. This requirement states that "the Forest Supervisor shall review conditions on the land covered by the Plan every five years to determine whether conditions or demands of the public have changed significantly." If conditions or demands of the public are found to have changed significantly, the Forest Plan is to be amended or revised.

In effect, the Regional Forester had decided that conditions or demands had changed when he issued direction to amend or revise Forest Plans. However, the Nez Perce continued the five-year review process, and identified elements in the present Plan which will need special attention as we amend or revise.

This preface briefly summarizes the 15 "findings" (known problem areas in our current Forest Plan) contained in the draft Five-Year Forest Plan Review document. Each of the "findings" will be addressed in the forthcoming Forest Plan revision. Please keep in mind that this preface is a "snapshot" of just the "findings" contained in the draft Five-Year Review document. The preface does not address the many areas in which there are no problems, nor does it address possible solutions to known problem areas, which are still being formulated. Not all resources are discussed. The reader is encouraged to review the different sections of this report for more information.

We expect the final Five-Year Review document to be completed and made available to the public in August, 1994. It will contain a more detailed explanation of the final "findings", alternative solutions and a recommended course of action. Solutions to the "findings" will incorporate ecosystem management principles. The final document will also outline areas where the Forest Plan is working well.

Management Area (MA) Allocations

FINDING 1: On-the-ground implementation of Forest Plan management area allocations has proven to be very difficult.

MONITORING REPORT REFERENCES: FY 92.....pages 156 - 159

The Forest Plan allocated all lands on the Forest to resource-based management areas. These management areas were computer-generated, and were assigned to specific land areas across the Forest with very little site-specific data and in a very short period of time. Since the only permanent storage of these MA assignments is in a computer data base, it is very difficult to determine exactly where each management area is located on the ground. In addition, the Forest Plan indicated that "management area boundaries are not firm

lines and do not always follow easily found topographic features such as major ridges." The Forest Plan further stated that some management areas are to be allocated at the project level.

During project planning, using site-specific information, Forest Plan management area assignments are reviewed by the interdisciplinary team responsible for planning the project. Over the past six years these teams have concluded that some of the Forest Plan management area assignments are not appropriate for some of the land and cannot be implemented without violating other Forest Plan direction.

When Forest Plans in Region One are revised, the present resource-based management areas are likely to be replaced with ecologically and socially based "geographic areas." This concept is still being developed, but some of the key features are:

- Geographic areas should be clearly established on the ground by the Forest Plan;
- Geographic areas should be contiguous, large, and based on ecosystem principles instead of individual resources;
- Geographic area boundaries should not split watersheds;
- Geographic area assignments should be accompanied by specific goals and objectives (desired future conditions) which can be monitored;
- Geographic areas should be subject to Forest Plan standards;
- Geographic area boundaries should not be constrained by National Forest boundaries unless that makes sense ecologically.

Fish

FINDING 2: The present Forest Plan will probably have to be amended before a revision is completed to reflect the results of consultation with the National Marine Fisheries Service and/or implementation of Interim Strategies for Managing Anadromous Fish-producing Watersheds (PACFISH).

MONITORING REPORT REFERENCES: FY 93.....pages 48 - 50
FY 92.....pages 53 - 56

A key feature of the Nez Perce Plan, a feature which was regarded as highly innovative in the early 1980s when the Plan was being developed, is establishment of a fish/water quality objective for each individual nonwilderness prescription watershed on the Forest. These objectives were based on NFMA species viability requirements. The fish/water quality objectives in the Nez Perce Plan (generally) are: no less than 70 percent of habitat potential in any stream, no less than 80 percent of habitat potential in streams which contain westslope cutthroat trout and/or steelhead, and no less than 90 percent of habitat potential in streams which contain chinook salmon. These objectives are accompanied by sediment yield guidelines and entry frequency guidelines (which are also Forest Plan standards). The Forest Plan did not quantify fish habitat elements other than sediment.

On May 22, 1992, Snake River basin chinook salmon were listed as "threatened" under the Endangered Species Act. Both spring/summer and fall chinook salmon stocks in the Salmon River drainage were listed, but only the fall stock in the Clearwater basin was listed. The Salmon River is also a travelway for the sockeye salmon, a species previously listed as "endangered."

The Forest Service is required to consult with the National Marine Fisheries Service (NMFS) on all ongoing and proposed projects which may affect the listed species. In a March 16, 1993, paper, NMFS set out their

expectations on the results of consultation. In summary, NMFS wants to see a demonstration of a reduction in fish mortality relative to a 1986-1990 base period. For the Forest Service, this in effect means a demonstration of improvement in habitat conditions over conditions that existed during the base period. Nez Perce Forest Plan fish/water quality objectives attempt to limit fish habitat degredation, not to eliminate it. If NMFS will not accept this approach, another approach will have to be developed and the existing Forest Plan amended.

PACFISH is a joint Forest Service-Bureau of Land Management proposal to conserve habitat for anadromous fish species. Implementation of proposed interim management direction pending completion of an Idaho PACFISH environmental impact statement will require amendment of existing Forest Plans. This will be done out of the Forest Service Washington Office.

FINDING 3: The Forest has not been able to determine fish habitat trends by drainage.

MONITORING REPORT REFERENCES:
FY 93.....pages 46 - 48
FY 92.....pages 50 - 52
FY 91.....pages 43 - 45
FY 90.....pages 37 - 38
FY 89.....pages 29 - 31
FY 88.....page 22

One Forest Plan goal is to provide and maintain a diversity and quality of habitat that ensures a harvestable surplus of resident and anadromous game fish species. A Forest Plan standard stipulates that established fishery/water quality objectives for all prescription watersheds as shown in Appendix A to the Plan will be met.

The Forest has not been able to measure fish habitat trends by drainage. Permanent monitoring station data have not been collected consistently. As a result of these inconsistencies in methodology, the usefulness of the data is limited and the results inconclusive.

Time and resources must be directed at analyzing and summarizing the available data to better evaluate the trends and usefulness of the current monitoring methodology.

Wildlife

FINDING 4: Forestwide adjustments in elk habitat objectives and analysis procedures may be necessary.

MONITORING REPORT REFERENCES:
FY 93.....pages 28, 35 and 40
FY 92.....page 31
FY 91.....pages 22 - 24

All three north Idaho Forest Plans incorporate the *Guidelines for Evaluating and Managing Summer Elk Habitat in Northern Idaho.* The objective of the *Guidelines* is to provide forest resource managers in northern Idaho a methodology to assess and mitigate the effects of roads, logging activities, and livestock grazing on summer elk habitat. The most significant variable in this methodology is road density.

At the project level, the *Guidelines* are used in conjunction with professional judgment to estimate existing habitat potential and to predict impacts, both beneficial and adverse, on future habitat potential. The results of this analysis are then compared to a pre-established objective.

The research supporting the *Guidelines* is over ten years old. This research and the *Guidelines* themselves are currently being reviewed. In addition, bull elk vulnerability is an issue that has become more important in recent years. This issue has several facets; some are related to seasons, regulations, and limits imposed

by the Idaho Department of Fish and Game, and some are related to Forest Service road densities and access management policies.

Inclusion of current research findings and procedural direction for analyzing bull elk vulnerability may result in changes in the *Guidelines.*

FINDING 5: The Forest is falling behind in acres of big game habitat improvement.

MONITORING REPORT REFERENCES:
FY 93.....pages 33 - 34
FY 92.....pages 37 and 162
FY 91.....page 28
FY 90.....page 26
FY 89.....page 20
FY 88.....page 18

The average annual Forest Plan objective of 5,000 acres of winter range improvement by prescribed fire has not been accomplished. The cumulative shortfall over six years is 14,200 acres. The Forest is also falling behind on the number of acres of timber harvest on big game winter range. A major reason for the shortfall in improvement by prescribed fire has been inadequate funding, complicated by high unit costs. Smoke management has also become an issue.

The Nez Perce Tribe, the Nez Perce Forest, and other interested parties are working together to explore, evaluate, and recommend alternative ways to achieve big game winter range improvement. These discussions will help determine what level of winter range improvement is attainable, based on the assumption that current funding levels will remain relatively constant.

FINDING 6: Retention of snags and green replacement trees in harvested timber sale units has proven to be difficult.

MONITORING REPORT REFERENCES:
FY 93.....page 30
FY 92.....page 33
FY 91.....page 25
FY 90.....page 23
FY 89.....pages 17 - 18
FY 88.....page 17

The Forest Plan requires that 1.8 snags per acre be provided for snag-dependent wildlife species in riparian areas and 1.4 snags per acre be provided in all other areas with all snags at least 12 inches diameter breast high (DBH) and at least one snag per 10 acres over 20 inches DBH (the Plan recognizes that this may not be possible in lodgepole pine stands; in such cases the largest snags available are to be provided). Further, because of loss of snags to windthrow, lightning, and other causes, five green trees per acre are to be provided in riparian areas and 4 green trees are to be provided in all other areas.

Insufficient snags are being retained in timber harvest areas. Snag management monitoring of four timber sales in FY 1993 revealed that none of the 11 harvest units evaluated met Forest Plan snag management guidelines. The primary reasons for this shortfall are:

- Forest resources have not been focused on meeting snag management direction;
- Snags that are deemed safety hazards (OSHA) are felled; and
- Snag management direction is not easily understood and, in some situations, is unrealistic to implement and difficult to administer. Broadcast burning of slash and snag removal by firewood cutters continues to take its toll on the remaining snags in harvest areas.

Snag management standards that are easily understood and that make sense from an ecological standpoint are needed, and these updated standards should be incorporated into the revised Forest Plan where appropriate. Biologists must work closer with the people who lay out and administer timber sales to ensure that the needs of snag-dependent species are met. Timber sale contract provisions regarding snag retention should be strengthened; and a process is needed to track what is happening with snags and replacement green trees through time.

Timber

FINDING 7: Timber outputs have been less than Forest Plan projections.

MONITORING REPORT REFERENCES:
FY 93.....pages 52 - 54
FY 92.....pages 57 - 62
FY 91.....pages 46 - 47
FY 90.....pages 39 - 41
FY 89.....pages 32 - 33

Timber outputs over the first six years of implementation have been less than Forest Plan projections because:

- Forest Plan estimates of the adverse effects of several constraints on timber outputs were too optimistic;
- Forest Plan projected timber yields (volume/acre) were too high;
- Forest Plan acreage identified as suitable for timber management was probably too high;
- Forest Plan management area acreages in some management areas where timber harvest is constrained to protect other resources was underestimated--notably the Management Area 10 (riparian) acreage; and
- Forest Plan prescriptions did not model reserve and snag recruitment implemented to meet other Forest Plan standards;

Any revised timber output projections must tie closely to overall desired future forest conditions and standards for other resources. Recalculating the Forestwide allowable sale quantity can be done only after agreement is reached on how ecosystem management is to be incorporated into forest planning and how this type of management is going to relate to commodity outputs.

Soils

FINDING 8: Dozer piling of slash in timber harvest units consistently violates Forest Plan soil standards.

MONITORING REPORT REFERENCES:
FY 92.....page 80
FY 90.....page 51
FY 89.....page 74

Forest Plan standards specify that no more than 20 percent of a management activity area (timber harvest unit) may be detrimentally compacted, displaced or puddled. Monitoring has shown that dozer piling of slash consistently violates this standard.

The Forest is moving away from dozer piling. Where topography and timber size are appropriate, the Forest will be requiring more cut-to-length log forwarding, which significantly decreases soil impacts and increases the spacing between roads. In addition, this situation can be mitigated by confining tractors to preplanned skid trails and increasing the use of grapple piling.

Water

FINDING 9: Forest Plan fish/water quality objectives and associated sediment yield and entry frequency guidelines need to be updated.

MONITORING REPORT REFERENCES:
FY 92.....pages 86 - 87
FY 91.....page 69
FY 90.....page 60
FY 89.....page 49

As previously stated, Appendix A to the Forest Plan lists fish/water quality objectives for all nonwilderness prescription watersheds on the Forest. These objectives are also Forest Plan standards.

Stream surveys done to determine existing fish habitat conditions and to inventory fish species present have produced new information. For example, if a stream previously thought to contain steelhead and not chinook salmon is found to contain chinook salmon, the logic behind the fish/water quality objectives requires that the objective for that stream be raised from 80 to 90 percent of habitat potential.

Since the rationale for relating fish/water quality objectives to fish species present in a specific watershed is clearly established in the Forest Plan, a formal amendment updating the objectives may not be necessary.

Range

FINDING 10: Currently, seven Allotment Management Plans (AMPs) address Forest Plan standards. Twenty-six active and 15 vacant allotments need analysis and revised Allotment Management Plans which incorporate Forest Plan standards.

MONITORING REPORT REFERENCES:
FY 93.....pages 82 - 83
FY 92.....pages 102 - 103
FY 91.....pages 70 - 73
FY 90.....pages 61 - 64

Three allotments have been analyzed and the AMPs updated since the Forest Plan was implemented in 1987. Given the current funding level and other Forest priorities, not all active allotments will have revised AMPs by Fiscal Year 1997 as stated in the Plan.

Although most AMP documents are out of date and do not address Forest Plan standards, management prescriptions and mitigation measures actually implemented on the ground as a result of consultation with the National Marine Fisheries Service will move management of most or all allotments within the standards.

Unless grazing funding is increased, completion of revised AMPs will be slow.

Heritage Resources

FINDING 11: Forest Plan management direction does not provide for adequate protection of Nez Perce Tribe religious rites areas.

MONITORING REPORT REFERENCES:
FY 93.....pages 90 - 91
FY 92.....pages 111 - 112 and 161
FY 91.....page 114
FY 90.....page 97
FY 88.....page 45

Forest Plan Goal 11 is to "locate, protect, and interpret significant prehistoric, historic, and cultural resources." Forest Plan standards state that the Forest "will ensure that Forest actions are not detrimental to the protection and preservation of significant Native American religious and cultural sites."

The Nez Perce Tribe has a number of religious rites areas on the Forest, and Forest Plan management direction does not provide for adequate protection of these areas.

The revised Forest Plan should incorporate management direction that will protect religious rites areas where they are clearly identified and supported by documentation.

Noxious Weeds

FINDING 12: The Forest is lagging behind in an integrated weed management program.

NOTE: Noxious weeds have not been a Forest Plan monitoring element.

The Forest Plan states that the Forest will implement a weed control program to confine present infestations and prevent establishment of new areas of noxious weeds. Current program activities are not extensive enough to contain past and present infestations, and in most cases weeds continue to spread unchecked. Noxious weeds are becoming a serious problem along rivers and transportation corridors, and in wilderness, grassland, and open forest. Many campgrounds, trailheads, and administrative sites also have unmanaged infestations.

In many areas, no process is in place which allows quick action on small infestations. In addition, the Forest currently does not have an up-to-date site-specific inventory of infestations from which to develop management objectives, prescriptions, and an effective prevention program. The Forest also lacks monitoring data to determine the magnitude and rate of spread of noxious weeds, and to determine the effectiveness of treatment.

The Forest must become more active and secure additional funding in the short term if noxious weeds are to be contained at a manageable level. The Forest Plan revision should include more effective program direction and standards for noxious weed management. Management of noxious weeds should be viewed as a stewardship issue, and as such should be incorporated into all Forest activities.

Recreation

FINDING 13: A methodology for the systematic monitoring of off-road vehicle (ORV) use has not been completed.

MONITORING REPORT REFERENCES:
FY 93.....page 89
FY 92.....page 110
FY 91.....page 77
FY 90.....page 67
FY 89.....page 53
FY 88.....page 9

One goal stated in the Forest Plan is to provide a wide range of dispersed and developed recreation opportunities and experiences by providing access, facilities, and education necessary to meet public demand. The Forest Plan also states that ORV impacts will be monitored through an ORV monitoring plan.

The Forest has not systematically monitored effects of other activities on ORV use and the effects of ORV use on forest resources. Little is being done in the way of ORV monitoring. The existing ORV Monitoring Plan may need updating.

FINDING 14: Recreation Opportunity Spectrum (ROS) category mapping needs to be updated.

MONITORING REPORT REFERENCES:
FY 93.....pages 88 - 89
FY 92.....page 109
FY 91.....page 76
FY 90.....page 66
FY 89.....page 53
FY 88.....page 8

A Forest Plan standard states that the Forest will manage for a full array of recreation opportunities, from primitive to roaded natural, as described by the Recreation Opportunity Spectrum (ROS).

The Forest ROS maps, for the most part, are inaccurate and need to be updated. This problem was created by not having the money and people to do the job right the first time and to update the maps once errors had been identified. The Forest should review and revise its ROS maps, incorporate ROS into all environmental analysis, and provide a mechanism for updating ROS acreage changes in the data base.

Forest Plan Monitoring

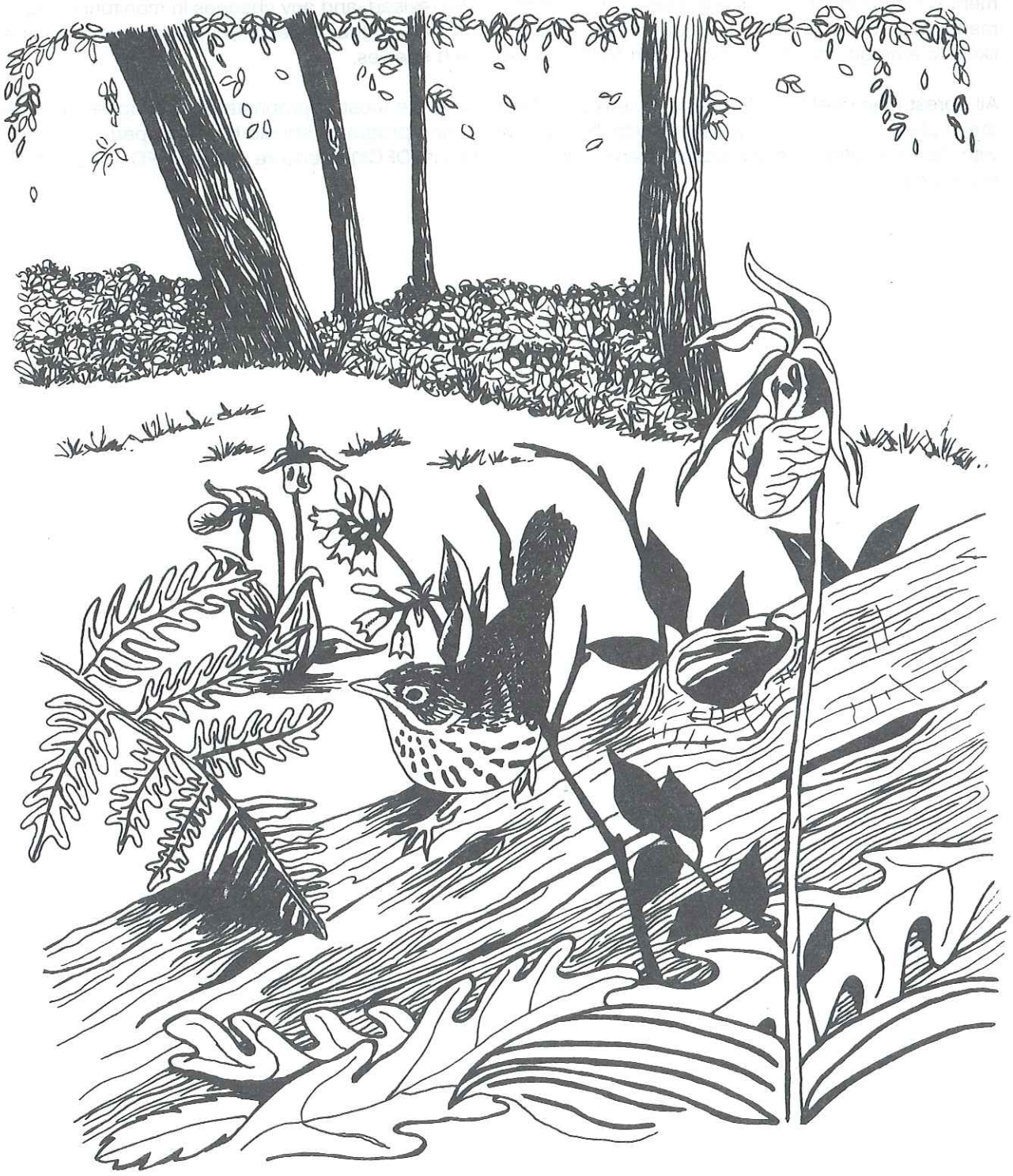
FINDING 15: Some Forest Plan monitoring requirements are inadequate.

MONITORING REPORT REFERENCES:
FY 93.....pages 89 and 112
FY 92.....pages 52, 80, 110, 136 and 161
FY 91.....page 77
FY 90.....pages 67 - 97
FY 89.....pages 53 and 82
FY 88.....page 9

Monitoring and evaluation comprise the management control system for the Forest Plan. They provide information to the decisionmaker and to the public on the progress and results of Forest Plan implementation. The monitoring requirements in Table V-1 and Appendix O of the Forest Plan do not fully reflect current and emerging Forest Plan monitoring needs.

The monitoring requirements in Table V-1 are based on specific provisions in the National Forest Management Act regulations. These regulations are currently being revised, and any changes in monitoring requirements must be reflected in individual Forest Plans. In addition, further watershed monitoring elements are likely to emerge from consultation with NMFS on listed fish species.

All Forest Plan direction should be reviewed to determine if the most appropriate monitoring requirements are in place to measure compliance with the Plan. Monitoring programs should be developed concurrently with the formulation of site specific Desired Future Conditions (DFCs) to ensure that the DFCs can in fact be monitored.



FOREST PLAN MONITORING AND EVALUATION REPORT

NEZ PERCE NATIONAL FOREST

FISCAL YEAR 1993

I. INTRODUCTION

The Land and Resource Management Plan (Forest Plan) for the Nez Perce National Forest was approved by the Regional Forester on October 8, 1987. Part of the planning process was a commitment to monitor and evaluate how well the Forest 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 information on the progress and results of implementing the Forest Plan.

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

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

- **Implementation Monitoring** [1] is used to determine if goals, objectives, standards, and management practices are implemented as detailed in the Forest Plan. The question being asked is, "Did we do what we said we were going to do?"

- **Effectiveness Monitoring** is used to determine if management practices as designed and executed are effective in meeting Forest Plan standards, goals, and objectives. The question being asked in this type of monitoring is, "Did the management practice do what we wanted it to do?"

- **Validation Monitoring** is used to determine whether the data, assumptions, and coefficients used in the development of the Forest Plan are correct. The question being asked here is, "Is there a better way to meet Forest Plan goals and objectives?"

Evaluation is the analysis and interpretation of monitoring results. Evaluation will assist in the review of the conditions on the land covered by the Forest Plan as required at least every 5 years by the National Forest Management Act Regulations. Planned actions resulting from evaluation are reported in the Proposed Amendments and Action Items sections.

Monitoring and evaluation focus on those facets of land and resource management which 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;
- items where projected effects may or may not occur as predicted;
- items where accomplishment of an objective or meeting of a standard determines ability to achieve another goal or objective.

Forest Plan management activities were monitored and evaluated as outlined in the Forest Plan Monitoring Requirements section of the Forest Plan, pages 6 and 7, Table V-1, and Appendix O to determine how well objectives were met and how closely management standards were applied. Numerous informal field reviews

[1] In this report, implementation monitoring is the type of monitoring assumed unless otherwise specified.

were also conducted on a variety of projects during fiscal year 1993. 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.

This report summarizes results of Forest Plan monitoring and evaluation conducted from October 1, 1991, through September 30, 1993. In some instances, it is difficult to determine how well the Forest Plan objective, 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. During 1993 a 5-year review of the Forest Plan was conducted. As the result of the 5-year review, recommendations have been made to change our operations to better implement the Forest Plan. Any changes in the Forest Plan will follow the direction outlined in Chapter V and will include appropriate public notification and completion of National Environmental Policy Act (NEPA) procedures. This report also provides information to the public and other levels of Federal, State, private industry, and interest groups to document the status on implementing the Forest Plan.

This report is organized into six main sections following the Introduction. Section II compares outputs and services planned to those accomplished and discusses the results of monitoring each item. Section III identifies research needs. Section IV summarizes existing amendments to the Forest Plan. Section V lists those people who contributed to the preparation of this Report. Following Section VI, the Approval, is the Appendix to this Report.

II. MONITORING AND EVALUATION RESULTS AND TRENDS

A. Were Outputs and Services Provided as Predicted

Table 1 compares amounts of activities and outputs projected in the Forest Plan (Page II-9, Table II-1) with assigned targets for these schedules of work, and with actual accomplishments for these activities and outputs for fiscal years 1988-1993. In future years, this report will not show this informatin for all years since the Forest Plan was signed.

Projected outputs and activities published in the Forest Plan (Page II-9, Table II-1) are shown in the columns labeled "Original Forest Plan Projection."

Targets are amounts of work assigned to the Forest by the Regional Forester and 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.

Activity and output projections for the next three fiscal years (FY 1994 - 1996) are displayed in Table 2. This is the best estimate of the work that could be completed and outputs produced given funding at levels similar to that received in recent years from this point forward. The activities and outputs originally published in the Forest Plan are shown in the column labeled "Original Forest Plan Projection."

Even though the reporting period for some monitoring items may be two or more years, information from all monitoring items is reported annually. This information will be evaluated at the end of the reporting period.

Table 1 - COMPARISON OF OUTPUTS AND ACTIVITIES WITH THOSE PROJECTED IN THE FOREST PLAN

			Fiscal Year 1988		Fiscal Year 1989	
Output or Activity	Units [1]	Original Forest Plan Projection [2]	Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]
RECREATION						
Developed/Dispersed Use	PAOT Days	---	324,000	349,000	510,000	510,000
Cultural Resource Inventory	Acres	8,000	---	3,753	---	2,600
WILDLIFE & FISH						
Wildlife Habitat Improvement						
Non-Structural						
Excess Timber Receipts	Acres	---	---	0	400	400
Appropriated Funds	Acres	5,000	3,800	1,000	2,800	2,800
KV Funds	Acres	---	---	2,040	5,358	5,765
Structural						
Appropriated Funds	Structures	---	---	1	2	1
KV Funds	Structures	---	---	3	23	16
Fish Habitat Improvement						
Non-Structural						
Challenge Cost Share Funds	Acres	---	---	4	15	15
Excess Timber Receipts	Acres	---	---	0	50	65
Appropriated Funds	Acres	50	108	104	40	40
KV Funds	Acres	---	---	0	12	2
Structural						
Challenge Cost Share Funds	Structures	---	---	0	50	50
Appropriated Funds	Structures	350	54	44	300	322
KV Funds	Structures	---	---	21	110	70
T&E Species Habitat Improvement						
Non-Structural						
Appropriated Funds	Acres	64	---	0	---	0
KV Funds	Acres	---	---	0	---	0
Structural						
Appropriated Funds	Structures	---	1	1	2	1
KV Funds	Structures	---	---	0	---	0
RANGE						
Permitted Grazing Use	AUM	43,000	43,000	32,801	43,000	25,022
Range Improvement						
Non-Structural	Acres	500	370	0	0	0
Structural	Structures	---	10	8	15	16
Allotment Management Plans	Plans	---	---	0	---	0
Noxious Weed Control	Acres	250	160	124	60	159
SOIL & WATER						
Soil & Water Resource Improvement						
Excess Timber Receipts	Acres	---	---	0	45	144
(Appropriated Funds)	Acres	320	49	47	200	131
(KV Funds)	Acres	---	---	45	---	93
Soil Inventory	Acres	---	---	0	---	0

Table 1 - COMPARISON OF OUTPUTS AND ACTIVITIES WITH THOSE PROJECTED IN THE FOREST PLAN , continued

			Fiscal Year 1988		Fiscal Year 1989	
Output or Activity	Units [1]	Original Forest Plan Projection [2]	Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]
MINERALS						
Minerals Management	Actions [5]	500	453	318	477	464
TIMBER						
Acres Harvested						
Clearcut	Acres	---	---	1,440	---	1,583
Shelterwood/Seed Tree	Acres	---	---	1,332	---	961
Shelterwood/Seed Tree-Removal/Final Cut	Acres	---	---	283	---	1,063
Commercial Thin	Acres	---	---	142	---	446
Selection	Acres	---	---	24	---	13
Other	Acres	---	---	19	---	45
Acres Sold						
Clearcut	Acres	1,710	---	2,846	---	2,133
Shelterwood/Seed Tree	Acres	2,705	---	1,549	---	731
Shelterwood/Seed Tree-Removal/Final Cut	Acres	130	---	1,921	---	374
Commercial Thin	Acres	100	---	0	---	0
Selection	Acres	125	---	189	---	0
Other	Acres	---	---	55	---	23
Volume Offered [6] (Total Volume)	MMBF	108	103	105	108	105
Volume Offered (Salvage Volume)	MMBF	---	5	7	4	6
Volume Offered (Non-Salvage)	MMBF	---	98	98	104	99
Advanced Prep (NEPA)	MMBF	---	178	27	109	102
Silvicultural Exams	Acres	120,000				
(Silvicultural Exam)	Acres	---	28,000	15,000	30,000	34,370
(Compartment Field Exams)	Acres	---	19,000	17,000	25,000	23,359
Reforestation						
Planting						
(Appropriated Funds)	Acres	1,610	1,227	1,180	975	931
(KV Funds)	Acres	2,900	1,467	1,692	1,884	1,885
Site Prep - Natural						
(Appropriated Funds)	Acres	200	---	0	100	132
(KV Funds)	Acres	300	153	0	468	255
Timber Stand Improvement						
(Appropriated Funds)	Acres	300	611	674	798	668
(KV Funds)	Acres	700	222	273	217	365
PROTECTION						
Fuels Management Activity and Natura Fuels	Acres	4,560	1,300	1,309	1,529	1,529
Fuels Management-Brush Disposal	Acres	---	4,600	3,041	3,590	4,111

Table 1 - COMPARISON OF OUTPUTS AND ACTIVITIES WITH THOSE PROJECTED IN THE FOREST PLAN , continued

			Fiscal Year 1988		Fiscal Year 1989	
Output or Activity	Units [1]	Original Forest Plan Projection [2]	Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]
LANDS						
Land Exchange	Acres	25	60	0	0	0
Special Uses	Cases	---	121	121	133	133
FACILITIES						
Landline Location	Miles	---	23	25	22	22
Trail Construction/Reconstruction	Miles	20	25	17	27	27
Excess Timber Receipts	Miles	---	---	0	5	5
Trail Maintenance Levels I - III	Miles	---	---	1,064	---	1,102
Capital Investment Roads	Miles	---	8	8	90	62
Timber Purchaser Credit Roads	Miles	---	92	92	130	127
Road Maintenance						
Level 1	Miles	---	---	1,084	---	1,937
Level 2	Miles	---	---	599	---	614
Level 3-5	Miles	---	---	651	---	651
Total	Miles	2,221	---	2,334	---	3,202
Road Construction						
Arterial	Miles	3	---	0	---	0
Collector	Miles	24	---	4	---	7
Local	Miles	26	---	49	---	30
TOTAL	Miles	53	---	53	---	37
Road Reconstruction						
Arterial	Miles	2	---	2	---	0
Collector	Miles	13	---	17	---	102
Local	Miles	15	---	30	---	50
TOTAL	Miles	30	---	49	---	152
Access Management						
Permanently Closed	Miles	33	---	77	---	31
Unrestricted	Miles	17	---	34	---	4
Restricted	Miles	33	---	32	---	40
TOTAL	Miles	83	---	143	---	75
Closure Devices						
Gates	Numbers	---	---	6	---	27
Concrete Barriers	Numbers	---	---	14	---	10
Earth Berm Barriers	Numbers	---	---	13	---	9

Table 1 - COMPARISON OF OUTPUTS AND ACTIVITIES WITH THOSE PROJECTED IN THE FOREST PLAN, continued

Output or Activity	Units [1]	Original Forest Plan Projection [2]	Fiscal Year 1990		Fiscal Year 1991	
			Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]
RECREATION						
Developed/Dispersed Use	PAOT Days	---	545,000	545,000	638,000	637,980
Cultural Resource Inventory	Acres	8,000	---	3,753	---	4,286
WILDLIFE & FISH						
Wildlife Habitat Improvement						
Non-Structural						
Appropriated Funds	Acres	5,000	3,500	6,898	3,000	1,903
KV Funds	Acres	---	---	705	---	732
Challenge Cost Share	Acres	---	---	0	---	600
Structural						
Appropriated Funds	Structures	---	---	10	---	71
KV Funds	Structures	---	---	104	---	0
Wildlife Inventory						
Appropriated Funds	Acres	---	---	6,378	---	136,520
KV Funds	Acres	---	---	0	---	0
Challenge Cost Share	Acres	---	---	0	---	5,000
Fish Habitat Improvement (Inland & Anadromous)						
Non-Structural						
Appropriated Funds	Acres	50	133	133	80	79
KV Funds	Acres	---	---	5	---	0
Challenge Cost-Share	Acres	---	---	0	---	5
Structural						
Appropriated Funds	Structures	350	257	257	127	119
KV Funds	Structures	---	---	15	---	56
Challenge Cost-Share	Structures	---	---	92	---	5
Fish Inventory (Inland & Anadromous)						
Appropriated Funds	Acres	---	---	25	---	8
KV Funds	Acres	---	---	5	---	0
Challenge Cost-Share	Acres	---	---	30	---	0
T&E Species Habitat Improvement						
Non-Structural						
Appropriated Funds	Acres	64	45	45	30	30
KV Funds	Acres	---	---	0	---	0
Structural						
Appropriated Funds	Structures	---	2	1	2	2
KV Funds	Structures	---	---	0	2	2
Challenge Cost Share	Structures	---	---	0	---	15
T&E Species Inventory						
Appropriated Funds	Acres	---	---	11,600	---	1,375
KV Funds	Acres	---	---	43,000	100	100

Table 1 - COMPARISON OF OUTPUTS AND ACTIVITIES WITH THOSE PROJECTED IN THE FOREST PLAN, continued

			Fiscal Year 1990		Fiscal Year 1991	
Output or Activity	Units [1]	Original Forest Plan Projection [2]	Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]
RANGE						
Permitted Grazing Use	AUM	43,000	43,000	32,907	43,000	23,602
Range Improvement						
Non-Structural	Acres	500	0	0	0	0
Structural	Structures	---	3	3	10	12
Allotment Management Plans	Plans	---	---	0	2	0
Noxious Weed Control	Acres	250	133	133	230	226
SOIL & WATER						
Soil & Water Resource Improvement						
Excess Timber Receipts	Acres	---	14	5	---	0
(Appropriated Funds)	Acres	320	150	159	105	165
(KV Funds)	Acres	---	37	36	0	85
Soil Inventory	Acres	---	110,000	129,604	45,000	51,787
MINERALS						
Minerals Management	Actions [5]	500	410	394	375	372

Table 1 - COMPARISON OF OUTPUTS AND ACTIVITIES WITH THOSE PROJECTED IN THE FOREST PLAN, continued

Output or Activity	Units [1]	Original Forest Plan Projection [2]	Fiscal Year 1990		Fiscal Year 1991	
			Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]
TIMBER						
Acres Harvested						
Clearcut	Acres	---	---	1,675	---	1,995
Shelterwood/Seed Tree Seed Cut	Acres	---	---	846	---	936
Shelterwood/Seed Tree-Removal/Final Cut	Acres	---	---	103	---	116
Commercial Thin	Acres	---	---	349	---	98
Selection	Acres	---	---	0	---	127
Other	Acres	---	---	31	---	170
Acres Sold						
Clearcut	Acres	1,710	---	2,337	---	2,426
Shelterwood/Seed Tree	Acres	2,705	---	990	---	2,029
Shelterwood/Seed Tree-Removal/Final Cut	Acres	130	---	455	---	602
Commercial Thin	Acres	100	---	34	---	67
Selection	Acres	125	---	31	---	0
Other	Acres	---	---	386	---	386
Volume Offered [6] (Total Volume)	MMBF	108	104	85	100	87
Volume Offered (Salvage Volume)	MMBF	---	24	25	34	38
Volume Offered (Non-Salvage)	MMBF	---	80	53	66	49
Advanced Prep (NEPA)	MMBF	---	155	42	37	89
Silvicultural Exams	Acres	109,000				
(Silvicultural Exam)	Acres	---	25,700	27,100	35,358	38,386
(Compartment Field Exams)	Acres	---	28,300	13,900	12,250	9,962
Reforestation						
Planting						
(Appropriated Funds)	Acres	860	634	677	1,134	1,079
(KV Funds)	Acres	3,200	1,612	1,685	1,639	1,769
Site Prep - Natural						
(Appropriated Funds)	Acres	80	0	0	0	0
(KV Funds)	Acres	1,100	267	0	46	0
Timber Stand Improvement						
(Appropriated Funds)	Acres	700	780	735	566	594
(KV Funds)	Acres	300	136	155	212	112
Excess Timber Receipts	Acres	---	---	0	279	305

Table 1 - COMPARISON OF OUTPUTS AND ACTIVITIES WITH THOSE PROJECTED IN THE FOREST PLAN, continued

Output or Activity	Units [1]	Original Forest Plan Projection [2]	Fiscal Year 1990		Fiscal Year 1991	
			Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]
PROTECTION						
Fuels Management Activity and Natural Fuels	Acres	1,060	1,674	1,674	1,470	1,596
Fuels Management-Brush Disposal	Acres	3,590	2,784	2,784	4,860	3,619
LANDS						
Land Exchange	Acres	25	60	0	40	728
Special Uses	Cases	---	121	121	121	121
FACILITIES						
Landline Location	Miles	---	25	25	23	23
Trail Construction/Reconstruction	Miles	20	24	24	27	27
Excess Timber Receipts	Miles	---	---	6	---	0
Contributed	Miles	---	---	1	---	0
Trail Maintenance Levels I - III	Miles	---	957	1,088	1,100	1,261
Capital Investment Roads	Miles	---	8	8	51	54
Timber Purchaser Credit Roads	Miles	---	92	92	150	173
Road Maintenance						
Level I	Miles	---	---	857	---	1,407
Level 2	Miles	---	---	409	---	490
Level 3-5	Miles	---	---	649	---	650
Total	Miles	---	1,915	1,915	2,581	2,547
Road Construction						
Arterial	Miles	3	---	0	---	0
Collector	Miles	24	---	10	---	37
Local	Miles	26	---	39	---	47
TOTAL	Miles	53	---	49	---	84
Road Reconstruction						
Arterial	Miles	2	---	5	---	5
Collector	Miles	13	---	50	---	45
Local	Miles	15	---	36	---	84
TOTAL	Miles	30	---	91	---	144
Access Management						
Permanently Closed	Miles	33	---	0	---	0
Unrestricted	Miles	17	---	0	---	2
Restricted	Miles	33	---	33	---	49
TOTAL	Miles	83	---	33	---	51
Closure Devices						
Gates	Numbers	---	---	13	---	3
Concrete Barriers	Numbers	---	---	6	---	4
Earth Berm Barriers	Numbers	---	---	0	---	1

Table 1 - COMPARISON OF OUTPUTS AND ACTIVITIES WITH THOSE PROJECTED IN THE FOREST PLAN, continued

Output or Activity	Units [1]	Original Forest Plan Projection [2]	Fiscal Year 1992		Fiscal Year 1993	
			Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]
RECREATION						
Developed/Dispersed Use	PAOT Days	---	300,000	300,000	519,000	437,00
Cultural Resource Inventory	Acres	8,000	---	3,664	---	2,290
WILDLIFE & FISH						
Wildlife Habitat Improvement						
Non-Structural						
Appropriated Funds	Acres	5,000	2,375	2,325	1,150	690
KV Funds	Acres	---	---	120	---	0
Challenge Cost Share	Acres	---	---	0	---	0
Structural						
Appropriated Funds	Structures	---	---	20	---	0
KV Funds	Structures	---	---	0	---	0
Wildlife Inventory						
Appropriated Funds	Acres	---	69	8,500	30,000	38,100
KV Funds	Acres	---	---	0	---	0
Challenge Cost Share	Acres	---	---	0	---	0
Fish Habitat Improvement (Inland & Anadromous)						
Non-Structural						
Appropriated Funds	Acres	50	165	112	135	91
KV Funds	Acres	---	---	0	---	0
Challenge Cost-Share	Acres	---	---	0	---	0
Structural						
T30 Appropriated Funds	Structures	350	159	112	135	56
T33 KV Funds	Structures	---	---	0	---	0
Challenge Cost-Share	Structures	---	---	0	---	0
Fish Inventory (Inland & Anadromous)						
Appropriated Funds	Acres	---	865	765	697	741
KV Funds	Acres	---	---	3	---	0
Challenge Cost-Share	Acres	---	---	0	---	0
T&E Species Habitat Improvement						
Non-Structural						
Appropriated Funds	Acres	64	45	45	50	50
KV Funds	Acres	---	---	0	---	3
Structural						
Appropriated Funds	Structures	---	2	2	---	0
KV Funds	Structures	---	---	0	---	15
Challenge Cost Share	Structures	---	---	0	---	0
T&E Species Inventory						
Appropriated Funds	Acres	---	4	5,050	4,000	8,500
KV Funds	Acres	---	---	0	---	---
Challenge Cost Share	Acres	---	---	200	---	10,600

Table 1 - COMPARISON OF OUTPUTS AND ACTIVITIES WITH THOSE PROJECTED IN THE FOREST PLAN, continued

			Fiscal Year 1992		Fiscal Year 1993	
Output or Activity	Units [1]	Original Forest Plan Projection [2]	Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]
RANGE						
Permitted Grazing Use	AUM	43,000	41,500	32,900	31,500	27,500
Range Improvement						
Non-Structural	Acres	500	0	0	96	114
Structural	Structures	---	2	3	7	10
Allotment Management Plans	Plans	---	4	3	0	0
Noxious Weed Control	Acres	250	200	202	136	140
SOIL & WATER						
Soil & Water Resource Improvement						
Excess Timber Receipts	Acres	---	0	5	---	0
(Appropriated Funds)	Acres	320	220	214	170	244
(KV Funds)	Acres	---	0	33	---	6
Soil Inventory	Acres	---	67,000	84,040	33,000	70,000
MINERALS						
Minerals Management	Actions [5]	500	417	417	400	718

Table 1 - COMPARISON OF OUTPUTS AND ACTIVITIES WITH THOSE PROJECTED IN THE FOREST PLAN, continued

Output or Activity	Units [1]	Original Forest Plan Projection [2]	Fiscal Year 1992 Targets [3]	Fiscal Year 1992 Accomplishment [4]	Fiscal Year 1993 Targets [3]	Fiscal Year 1993 Accomplishment [4]
TIMBER						
Acres Harvested						
Clearcut	Acres	---	---	1,793	---	1,650
Shelterwood/Seed Tree Seed Cut	Acres	---	---	849	---	615
Shelterwood/Seed Tree-Removal/Final Cut	Acres	---	---	118	---	22
Commercial Thin	Acres	---	---	631	---	127
Selection	Acres	---	---	0	---	0
Other	Acres	---	---	0	---	0
Acres Sold						
Clearcut	Acres	1,710	---	15	---	371
Shelterwood/Seed Tree	Acres	2,705	---	0	---	1,384
Shelterwood/Seed Tree-Removal/Final Cut	Acres	130	---	0	---	608
Commercial Thin	Acres	100	---	0	---	0
Selection	Acres	125	---	12	---	45
Other	Acres	---	---	145	---	574
Volume Offered [6] (Total Volume)	MMBF	108	77	50	66	34
Volume Offered (Salvage Volume)	MMBF	---	32	23	34	26
Volume Offered (Non-Salvage)	MMBF	---	45	27	32	8
Advanced Prep (NEPA)	MMBF	---	92	0	66	20
Silvicultural Exams	Acres	109,000	---	---	---	---
(Silvicultural Exam)	Acres	---	---	22,005	---	17,236
(Compartment Field Exams)	Acres	---	---	2,730	---	881
Reforestation						
Planting						
(Appropriated Funds)	Acres	860	1,585	1,494	1,095	1,296
(KV Funds)	Acres	3,200	1,515	1,417	2,023	1,976
Site Prep - Natural						
(Appropriated Funds)	Acres	80	100	0	---	0
(KV Funds)	Acres	1,100	13	0	61	64
Timber Stand Improvement						
(Appropriated Funds)	Acres	700	579	742	696	870
(KV Funds)	Acres	300	350	473	350	494
Excess Timber Receipts	Acres	---	---	0	---	0

Table 1 - COMPARISON OF OUTPUTS AND ACTIVITIES WITH THOSE PROJECTED IN THE FOREST PLAN, continued

Output or Activity	Units [1]	Original Forest Plan Projection [2]	Fiscal Year 1992		Fiscal Year 1993	
			Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]
PROTECTION						
Fuels Management Activity and Natural Fuels	Acres	1,060	750	807	1,500	1,613
Fuels Management-Brush Disposal	Acres	3,590	2,426	2,366	2,200	3,328
LANDS						
Land Exchange	Acres	25	0	24	117	117
Special Uses	Cases	---	0	133	0	163
FACILITIES						
Landline Location	Miles	---	20	20	14	14
Trail Construction/Reconstruction	Miles	20	22	26	16	16
Excess Timber Receipts	Miles	---	---	0	---	0
Contributed	Miles	---	---	0	---	10
Trail Maintenance Levels I - III	Miles	---	1,100	1,832	1,623	1,715
Capital Investment Roads	Miles	---	51	12	0	0
Timber Purchaser Credit Roads	Miles	---	150	42	0	47
Road Maintenance						
Level I	Miles	779	---	930	1050	537
Level 2	Miles	579	---	490	781	200
Level 3-5	Miles	692	---	670	932	400
Total	Miles	2,050	2,581	2,090	2,763	1,137
Road Construction						
Arterial	Miles	3	---	0	---	0
Collector	Miles	24	---	0	---	2
Local	Miles	26	---	30	---	28
TOTAL	Miles	53	---	30	---	30
Road Reconstruction						
Arterial	Miles	2	---	0	---	10
Collector	Miles	13	---	58	---	63
Local	Miles	15	---	43	---	4
TOTAL	Miles	30	---	101	---	77
Access Management						
Permanently Closed	Miles	33	---	0	---	0
Unrestricted	Miles	17	---	2	---	0
Restricted	Miles	33	---	49	---	30
TOTAL	Miles	83	---	51	---	30
Closure Devices						
Gates	Numbers	---	---	3	---	5
Concrete Barriers	Numbers	---	---	4	---	5
Earth Berm Barriers	Numbers	---	---	1	---	0

Footnotes for Table 1

[1] Unit Abbreviations

PAOT Days	persons at one time
MAUM	thousand animal unit months
MMBF	million board feet

[2] Projections originally published in the Forest Plan.

[3] Forest Target for this fiscal year. Targets for grazing use are the same as permitted capacity.

[4] Actual units accomplished during this fiscal year. Accomplishments reported for grazing use are actual use. Actual use may be less than capacity for the convenience of the permittee.

[5] Includes administrative actions to process and administer operating plans, Notices of Intent, leases, and permits, as well as site-specific evaluations, hearings, and appeals.

[6] Timber Volume Offered includes all chargeable (i.e. counting towards Allowable Sale Quantity (ASQ)) and non-chargeable volume offered for sale during the fiscal year. Timber Volume Offered also includes sales that received no bids. Volume offered counts toward the Forest's financed sell target while volume sold counts toward allowable sale quantity.

TABLE 2 - PROJECTED OUTPUTS AND ACTIVITIES AT PROPOSED FUNDING LEVELS, FY 1994-1996

Output or Activity	Unit of Measure	Original Forest Plan Projection	FY 1994	FY 1995	FY 1996
RECREATION					
Developed/Dispersed Use	PAOT Days	---	783,000	783,000	519,000
Cultural Resource Inventory	Acres	8,000	---	---	---
WILDLIFE & FISH					
Wildlife Habitat Improvement (APP)	Acres	5,000	550	300	5,000
Wildlife Habitat Improvement (KV)	Acres	---	580	668	668
Wildlife Habitat Improvement (APP)	Structures	---	0	0	20
Wildlife Habitat Improvement (KV)	Structures	---	5	407	407
Fish Habitat Improvement (APP)	Acres	400	113	342	310
Fish Habitat Improvement (KV)	Acres	---	10	1	1
Fish Habitat Improvement (APP)	Structures	---	115	215	112
Fish Habitat Improvement (KV)	Structures	---	10	0	0
T&E Species Habitat Improvement (APP)	Acres	64	22	22	6,000
T&E Species Habitat Improvement (KV)	Acres	---	3	2	2
T&E Species Habitat Improvement (APP)	Structures	---	2	0	0
T&E Species Habitat Improvement (KV)	Structures	---	5	1	1
RANGE					
Permitted Grazing Use	MAUM	43	42	42	32
Range Improvement (Structural)	Structures	---	10	4	0
Range Improvement (Non-Structural)	Acres	500	25	0	100
Allotment Management Plans	Plans	---	---	4	0
Noxious Weed Control	Acres	250	101	350	500
SOIL AND WATER					
Soil Inventory	Acres	---	45,000	73,000	30,000
Soil & Water Resource Improvement (APP)	Acres	320	228	165	150
Soil & Water Resource Improvement (KV)	Acres	---	63	75	75
LANDS					
Land Exchange	Acres	25	25	0	10
Special Uses	Acres	---	120	66	128
MINERALS					
Minerals Management	Actions	500	417	420	150
TIMBER					
Program Volume (Total Volume)	MMBF	108	10	40	45
Program Volume (Salvage Volume)	MMBF	---	7	15	15
Program Volume (Non-Salvage)	MMBF	---	3	25	30
Advanced Prep (NEPA)	MMBF	---	3	30	20
Silvicultural Exams	Acres	---	29,000	35,000	16,000
Reforestation - Planting (APP)	Acres	940	360	743	872
Reforestation - Site Prep (APP)	Acres	---	40	83	80
Reforestation - Planting (KV)	Acres	4,300	3,200	1,334	2,400
Reforestation - Site Prep (KV)	Acres	---	1,100	666	600
Timber Stand Improvement - (APP)	Acres	700	620	530	670
Timber Stand Improvement - (KV)	Acres	300	200	245	250
PROTECTION					
Fuels Management Activity and Natural Fuels	Acres	4,540	1,400	3,000	3,000
Fuels Management-Brush Disposal	Acres	---	3,500	2,800	2,800
FACILITIES					
Landline Location	Miles	20	15	16	12
Trail Construction/Reconstruction	Miles	---	16	16	17
Trail Maintenance	Miles	---	1,500	1,320	1,800
Capital Investment Roads	Miles	---	22	0	15
Timber Purchaser Credit Roads	Miles	---	48	20	45
Road Maintenance	Miles	---	2,763	2,763	2,763

[1] Trail Maintenance Level 0 includes all available and useable system trails.

B. Are the Dollars and Workforce Costs of the Plan Implemented as Expected

Table 3 shows the amount of funds allocated to the Forest and expended by the Forest for Fiscal Years 1988 through 1993.

Table 4 displays updated projected annual costs for fiscal years 1993-1996 at a level similar to that received in past years. The request shown for Fiscal Year 1996 cannot be directly compared with that in other years for several reasons. First, planned expenditures for forest planning and integrated resource inventories are included under ecosystem management rather than functional areas. Second, support of various disciplines to timber and range are shown under timber and range this year rather than under the resource area providing the support. Third, projected law enforcement expenses are shown directly, rather than being shown under the resource area receiving law enforcement help.

Dollars have been adjusted to constant 1993 values for Tables 3 and 4.

Throughout this report various types of funding are mentioned. Much of our 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 other organizations and private parties on a cost share or matching fund basis.

The following section describes these 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 range betterment program on National Forest lands is financed by a portion of grazing fee receipts. Fifty percent of grazing fee receipts are returned to the Forest to fund the 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 costs of labor and supplies. Often, the permittee cooperates in these activities by supplying the labor needed to implement and maintain the improvements.

Permanent & 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 and for sale preparation and administration of salvage timber harvest. These funds are used to salvage insect infested, dead, damaged, or down timber, and to remove associated trees for tree 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 are funds deposited by timber purchasers used primarily for reforestation, timber stand improvement, and other resource activities to improve the future productivity of the renewable resources on timber sale areas.

Cooperative Work, Other (CWFS Other) Funds
CWFS Other funds are 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. These deposits are used in conjunction with the road maintenance appropriation to provide maintenance of system roads by the Forest Service.

Excess Timber Sale Receipts

These are monies that result from timber sale receipts (revenues) exceeding the amounts budgeted by Congress. Congress appropriates funds to cover resource management costs. Occasionally revenues exceed the amount initially budgeted. Congress has then given this excess to the Forests to accomplish additional resource management projects not accomplished with the initial appropriations. Excess timber sale receipts can be used for trail maintenance, trail construction, wildlife and fish habitat management, soil, water, and air management, cultural resource management, wilderness management, reforestation, and timber sale administration and management.

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 improvement activities. These funds are currently permitted for use in recreation, wildlife and fish cost-share programs.

Table 3 - COMPARISON OF PROJECTED FUNDING LEVELS, ALLOCATIONS, AND EXPENDITURES

Funding Description	Fiscal Year 1988		Fiscal Year 1989	
	Allocation (M 1993$)	Expenditures (M 1993$)	Allocation (M 1993$)	Expenditures (M 1993$)
GENERAL ADMINISTRATION				
General Administration	1,946	1,979	1,553	1,803
RECREATION				
Recreation	633	633	682	759
WILDLIFE & FISH				
Wildlife and Fish	770	757	955	987
RANGE				
Range	247	258	217	270
Range (Noxious Weeds)	18	9	20	8
Range Improvement	22	30	22	25
SOIL & WATER				
Soil, Air, Water	361	324	438	401
MINERALS				
Minerals	297	302	272	335
TIMBER				
Timber Sale Prep/Administration	1593	1638	1705	1618
Timber Planning	248	314	161	190
Silvicultural Exams	409	365	482	501
Reforestation - Appropriated	766	780	706	556
Timber Stand Improvement - Appropriated	139	191	161	114
Tree Improvement	48	90	68	17
KV Reforestation	668	858	1,087	1,388
KV Timber Stand Improvement	52	137	57	64
KV - Other	222	323	266	271
Co-op Work, Forest Service, Other - Trust Fund	211	372	206	431
Timber Salvage Sales - Permanent Fund	126	108	150	202
PROTECTION				
Fire Protection	1,329	1,309	1,409	1,189
Fire Protection (Fuels)	108	93	52	48
Cooperative Law Enforcement	41	41	47	62
Brush Disposal (Perm. Fund)	556	405	486	481
LANDS				
Special Uses	55	65	52	42
Land Exchange/Ownership Status	45	45	33	67
Landline Location	138	146	126	99
Land Acquisition	42	25	16	677
FACILITIES				
Facility Maintenance	206	212	165	164
Road Maintenance [1]	716	1,123	1,188	1,175
Trail Maintenance	544	508	486	461
Recreation Construction	76	68	169	141
Facility Construction - Forest Admin.,Other	9	53	8	1
Engineering Construction Support	1,521	1,535	1,678	1,729
Construction--Capital Investment Roads	579	579	4,554	1,214
Trail Construction/Reconstruction	378	377	357	303
Timber Purchaser Road Construction	3,916	2,914	3,276	2,889
TOTAL	19,035	18,966	23,310	20,682

[1] Road Maintenance expenditures include 413 M$ (FY 1988) and 545 M$ (FY 1989) for Capital Construction (Restoration - Heavy Maintenance).

Table 3 - COMPARISON OF PROJECTED FUNDING LEVELS, ALLOCATIONS, AND EXPENDITURES, continued

Funding Description	Fiscal Year 1990		Fiscal Year 1991	
	Allocation (M 1993$)	Expenditures (M 1993$)	Allocation (M 1993$)	Expenditures (M 1993$)
GENERAL ADMINISTRATION				
General Administration	1,429	1,414	1,451	1,660
RECREATION				
Recreation	688	861	757	910
WILDLIFE & FISH				
Wildlife and Fish	1,094	1,093	1,061	1,109
RANGE				
Range	244	259	248	288
Range (Noxious Weeds)	19	10	20	11
Range Improvement	25	17	24	18
SOIL & WATER				
Soil, Air, Water	632	622	558	588
MINERALS				
Minerals	267	292	234	252
TIMBER				
Timber Sale Prep/Administration	1,933	1,635	1,939	1,374
Timber Planning	158	90	61	108
Silvicultural Exams	492	442	496	535
Reforestation - Appropriated	572	509	748	624
Timber Stand Improvement - Appropriated	183	138	107	113
Tree Improvement	119	63	117	475
KV Reforestation	1,450	1,247	1,240	1,102
KV Timber Stand Improvement	38	24	56	93
KV Other	457	451	514	296
Co-op Work, Forest Service, Other - Trust Fund	195	224	217	323
Timber Salvage Sales - Permanent Fund	727	728	689	1,017
PROTECTION				
Fire Protection	1,112	1,143	1,348	1,311
Fire Protection (Fuels)	128	90	47	81
Cooperative Law Enforcement	62	58	60	59
Brush Disposal (Perm. Fund)	542	544	525	778
LANDS				
Special Uses	41	38	52	33
Land Exchange/Ownership Status	35	65	45	118
Landline Location	126	129	126	132
Land Acquisition	22	15	5	11
FACILITIES				
Facility Maintenance [2]	153	131	163	169
Road Maintenance	667	1,061	654	663
Trail Maintenance [3]	602	630	739	682
Recreation Construction	11	22	54	94
Facility Construction - Forest Admin., Other	0	7	0	0
Engineering Construction Support	1,526	1,457	1,530	1,425
Construction - Capital Investment Roads	2,426	2,426	2,545	2,545
Trail Construction/Reconstruction	310	229	385	507
Timber Purchaser Road Construction	3,101	3,101	1,530	1,346
TOTAL	21,586	21,265	20,345	20,850

[2]Carryover included, FY 1991
[3]Includes Frank Church, FY 1991

Table 3 - COMPARISON OF PROJECTED FUNDING LEVELS, ALLOCATIONS, AND EXPENDITURES, continued

Funding Description	Fiscal Year 1992		Fiscal Year 1993	
	Allocation (M 1993$)	Expenditures (M 1993$)	Allocation (M 1993$)	Expenditures (M 1993$)
GENERAL ADMINISTRATION				
General Administration	1,683	1,971	1,726	1,696
RECREATION				
Recreation	1,070	1,137	1,361	1,311
WILDLIFE & FISH				
Wildlife and Fish	1,207	1,048	1,439	1,323
RANGE				
Range	352	288	383	380
Range (Noxious Weeds)	29	18	46	43
Range Improvement	22	14	28	37
SOIL & WATER				
Soil, Air, Water	584	659	615	544
MINERALS				
Minerals	257	251	258	246
TIMBER				
Timber Sale Prep/Administration	1,985	2,129	1,309	1,329
Timber Planning	104	125	239	218
Silvicultural Exams	441	559	375	349
Reforestation - Appropriated	773	255	743	664
Timber Stand Improvement - Appropriated	105	67	177	152
Tree Improvement	124	242	425	181
KV Reforestation	1,149	757	1,372	1,211
KV Timber Stand Improvement	87	45	75	50
KV Other	606	361	455	249
Co-op Work, Forest Service, Other - Trust Fund	225	607	373	364
Timber Salvage Sales - Permanent Fund	1,024	785	2,372	2,129
PROTECTION				
Fire Protection	804	1,442	1,260	1,281
Fire Protection (Fuels)	46	68	163	115
Cooperative Law Enforcement	61	87	36	26
Brush Disposal (Perm. Fund)	537	447	497	390
LANDS				
Special Uses	76	63	96	83
Land Exchange/Ownership Status	24	68	12	7
Landline Location	178	179	117	117
Land Acquisition	48	130	614	610
FACILITIES				
Facility Maintenance	235	232	168	170
Road Maintenance	786	785	503	509
Trail Maintenance [4]	983	964	856	839
Recreation Construction	566	485	201	186
Facility Construction - Forest Admin., Other	0	0	64	58
Engineering Construction Support	1,886	2,210	793	753
Construction - Capital Investment Roads	901	901	108	108
Trail Construction/Reconstruction	529	534	410	399
Timber Purchaser Road Construction	1,360	1,436	41	2,607
TOTAL	20,847	21,349	19,710	20,734

[4]Includes Frank Church, FY 1992 and FY 1993

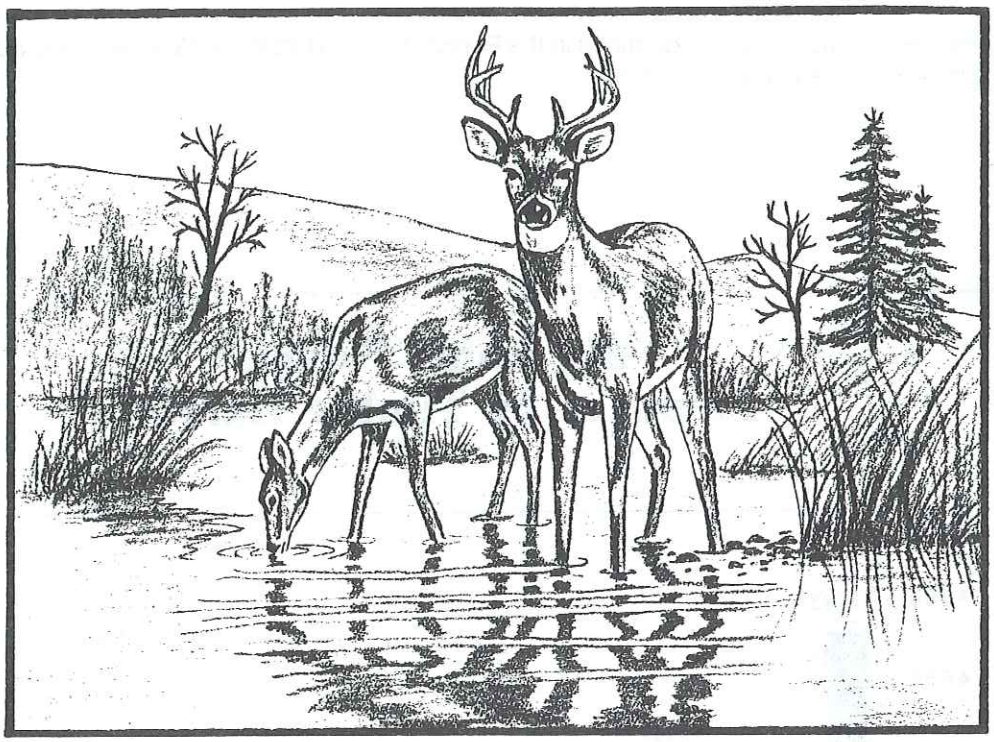
TABLE 4 - FOREST PLAN FUNDING NEEDS, FY 1994 - FY 1996

Funding Description	FY 1994 (M 1993$)	FY 1995 (M 1993$)	FY 1996 (M 1993$)
GENERAL ADMINISTRATION			
General Administration	1,653	1,661	1,161
RECREATION			
Recreation	1,116	1,307	1,065
WILDLIFE & FISH			
Wildlife and Fish	1,116	1,527	1,219
RANGE			
Range	304	639	340
Range (Noxious Weeds)	20	36	50
Range Improvement	24	31	10
SOIL & WATER			
Soil, Air, Water	507	621	438
MINERALS			
Minerals	304	344	349
TIMBER			
Timber Sale Prep/Administration	1,551	1,987	1,244
Timber Planning	196	129	42
Silvicultural Exams	365	450	259
Reforestation - Appropriated	355	605	648
Timber Stand Improvement - Appropriated	108	105	152
Tree Improvement	54	222	100
KV Reforestation	1,157	1,307	1,490
KV Timber Stand Improvement	508	63	65
KV Other	788	749	609
CWFS Other - Trust Fund	293	351	285
Timber Salvage Sales - Permanent Fund	508	1,027	2,604
PROTECTION			
Fire Protection	1,933	3,188	3,050
Fire Protection (Fuels)	98	331	186
Law Enforcement	61	55	444
Brush Disposal (Perm. Fund)	504	513	450
LANDS			
Special Uses	61	82	91
Land Exchange/Ownership Status	71	21	20
Landline Location	121	123	120
Land Acquisition	25	103	0
FACILITIES			
Facility Maintenance	163	185	174
Road Maintenance	710	800	686
Trail Maintenance	698	711	711
Recreation Construction	147	0	250
Facility Constr. - Forest Admin., Other	259	251	665
Engineering Construction Support	1,430	1,149	640
Construction - Capital Investment Roads	2,891	2,810	1,250
Trail Construction/Reconstruction	876	852	900
Timber Purchaser Road Construction	2,622	2,549	2,500
ECOSYSTEM MANAGEMENT	---	---	1,297
TOTAL	23,597	26,884	24,267

C. Forest Plan Monitoring Requirements

Monitoring and evaluation results are summarized and discussed on the following pages. Each monitoring item lists: (1) what is being measured; (2) frequency of measurement; (3) reporting period; (4) variables which would initiate further evaluation; (5) the monitoring results; and (6) the evaluation of the monitoring results. The items are arranged by resource and follow the requirements in the Nez Perce Forest Plan (Table V-1).

WILDLIFE



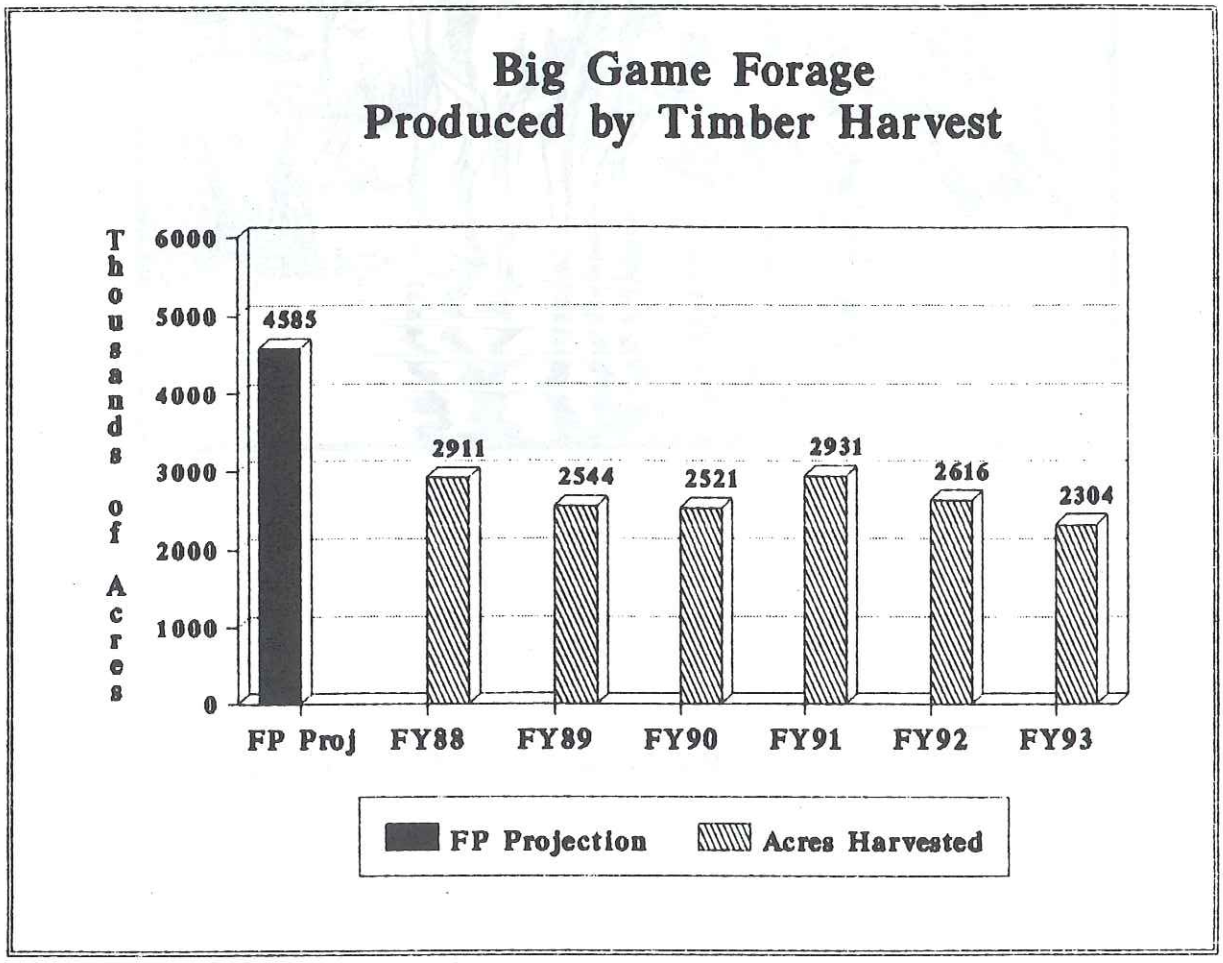
Item 1c:	Big-Game Habitat Carrying Capacity
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	5 years (FY 1993)
Variability Which Would Initiate Further Evaluation:	Significant trend deviations (evaluated at 5-year intervals) from planned or expected forage-generating activities or events (timber harvest, prescribed fire, and wildfire).

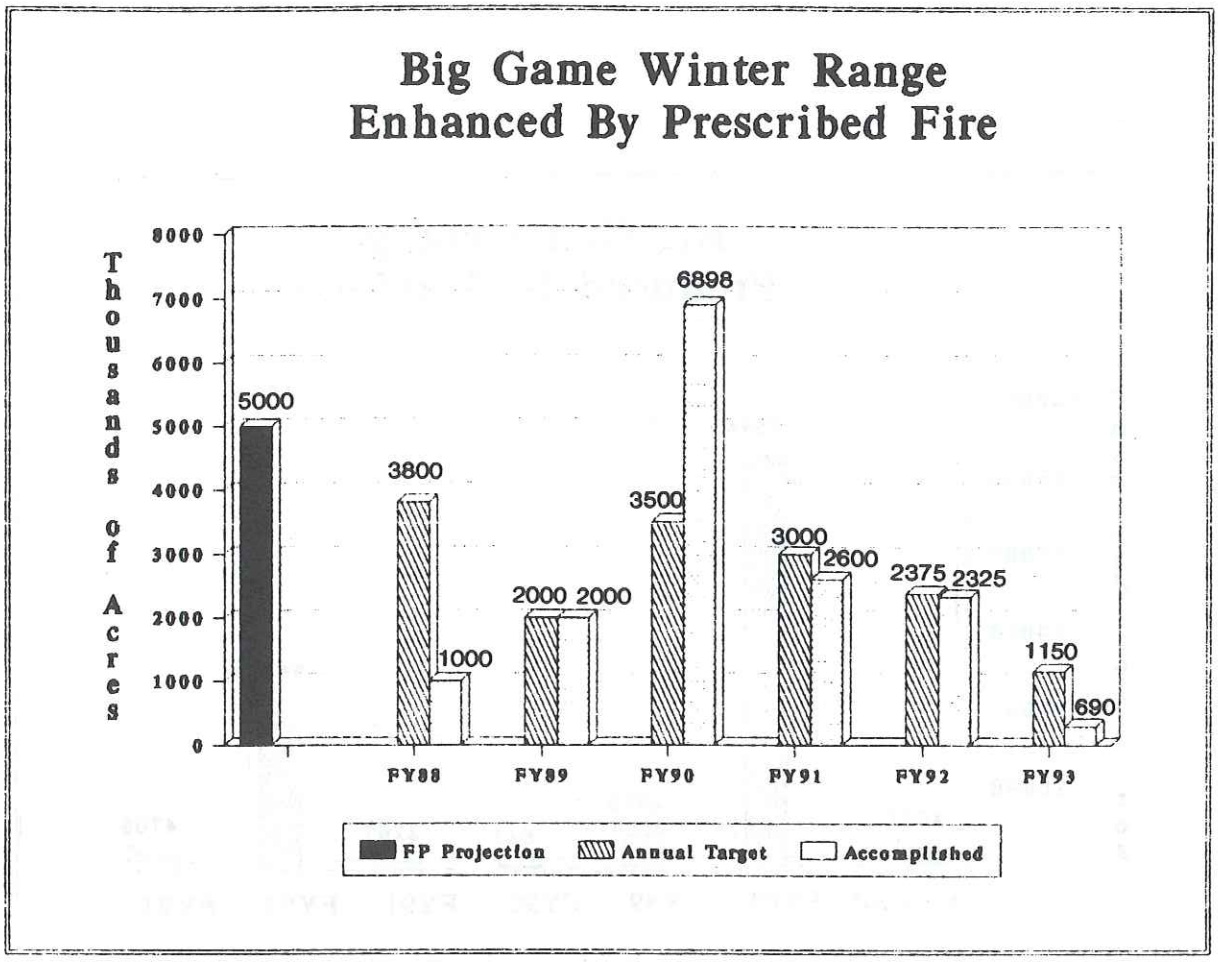
Forage Production

Monitoring Results:

Timber harvest (i.e., clearcut, seedtree and shelterwood), 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 by timber harvest and fire, typically increases elk and deer forage. The Forest Plan projected an annual average of 4585 acres of regeneration timber harvest and 5000 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 4700 acres per year.

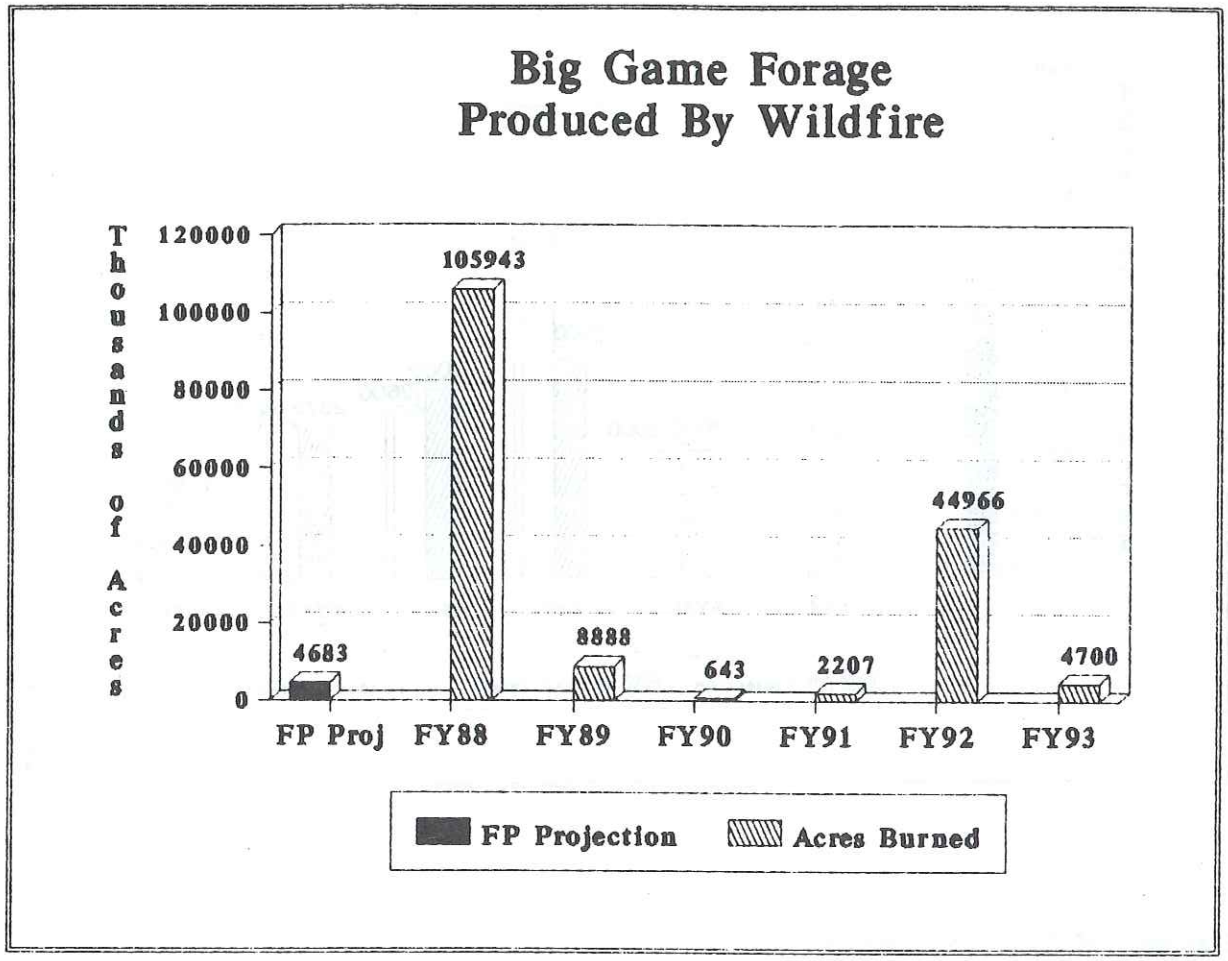
Projected acreages for each variable identified in the Forest Plan, and their FY 93 targets and accomplishments, are depicted in the following graphs.





Evaluation of Monitoring Results:

Since Forest Plan implementation, timber harvest that increased big game forage has averaged about 2660 acres per year (60 percent of the Forest Plan projection). Prescribed fire projects for big game winter range has also averaged about 2980 acres per year (60 percent of projection). Large wildfires of 1988 and 1992 caused wildfire acreages to average approximately 21,100 acres per year (450 percent above the estimate). Though timber harvest and big game winter range prescribed fires have fallen short of planned acreages, wildfires have helped to compensate for these shortfalls.


Big Game Forage
Produced By Wildfire
Thousands of Acres
120000
100000
80000
60000
40000
20000
0
4683
105943
8888
643
2207
44966
4700
FP Proj
FY88
FY89
FY90
FY91
FY92
FY93
FP Projection
Acres Burned

Summer Elk Habitat

The Forest Plan identified approximately 1,887,000 acres of elk summer range on the Nez Perce Forest. Of this amount, approximately 866,000 acres (46%) of elk summer range are within the Forest's three designated wildernesses. The Forest Plan designated elk summer range effectiveness objectives, outside wilderness areas, at 25% on approximately 165,000 acres; 50% on approximately 573,000; 75% on approximately 215,000; and 100% on approximately 74,000 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 depicted in the Forest Plan.

Monitoring Results:

The "Guidelines for Evaluating and Managing Elk Habitat in Northern Idaho" are routinely used to assess all timber, range and mineral development proposals occurring on elk summer range.

Evaluation of Monitoring Results:

Compliance with summer elk objectives for projects implemented in FY 93 has been mixed. Assessment of Forestwide elk summer range conditions indicates: 1) Elk habitat effectiveness objectives are being met or exceeded on 75% of the Forest's elk summer range; and 2) needed adjustments to meet Forest Plan objectives may constrain motorized vehicle access and limit timber harvest more than anticipated.

Moose Winter Range (MA 21)

Pacific yew canopy cover and browse are important components of moose winter habitat. Timber harvest on moose winter range is limited to 5 percent of MA 21, per decade.

Monitoring Results:

No site-specific or MA 21-specific monitoring was done on the Forest in FY93. The Forestwide inventory of the yew wood was completed in FY93. Data collected from this inventory will be used to better validate and designate Management Area 21.

Evaluation of Monitoring Results:

Forest Plan direction to limit timber harvest to 5% per decade has been followed for projects initiated under the Forest Plan. Lack of funding has precluded gathering management data or conducting research to better describe preferred moose winter range characteristics.

Item 1d:	Nongame Habitat
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	5 years (FY 1992)
Variability Which 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.

Monitoring Results:

Two timber sales were planned or initiated in FY 93 involving old-growth standards. These timber sales were the Scott Fire and Selway Fire Salvage Sales. In the Scott Fire Salvage Sale, the fire that precipitated the timber sale burned through designated old growth forest stands. During the preparation of the environmental assessment, the interdisciplinary team searched for suitable stands to replace the acreage of old growth consumed by the fire. They were unable to find suitable replacement old growth stands in the vicinity of the fire. Therefore, it was determined to retain the current areas designated as MA 20. It was also determined that salvage timber harvest could occur in the original old growth stands provided: 1) all live trees were retained; 2) a variety of standing dead and down trees were retained throughout MA 20; and 3) timber harvest of snags assured the amount of retained standing dead and down wood matched old growth forest character for the site. To allow salvage timber harvest to occur prior to the fifth decade (as described in the Forest Plan), a site-specific amendment to the Forest Plan was approved.

In the Selway Fire Salvage, no dedicated MA 20 existed in the project study area. The District wildlife biologist conducted site-specific surveys to determine if and where stands suitable for old growth existed. The decision to proceed with timber harvest included provisions to assure that adequate candidate old growth stands were retained in the study area for possible future designation. In essence, the provisions assured adequate candidate old growth forest stands were retained by avoiding removal of any timber from within these stands.

In FY93, an Ecosystem Management Team, an interdisciplinary team of Forest specialists, began to analyze implications related to forest fragmentation (connecting corridors, forested patch size and fire effects). Their knowledge is improving the Forest's understanding of maintenance and long-term management of coniferous old-growth forest and associated biota.

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 is being used. These new criteria have promoted field survey and interpretation resulting in improved determinations of old growth forests.

The effects of stand-replacing forest fires on the retention of old-growth is a concern. The use of fire or some form of silvicultural prescription using thinning could be needed to protect designated old growth forest from stand-replacing fires. Although timber harvest did occur within MA 20 in FY93, this is in compliance with the amended Forest Plan standards specific to the Scott Salvage Timber Sale.

Snag Habitats

Monitoring Results:

Snag management monitoring of four timber sales (11 harvest units) on three districts in 1993 revealed that none of the harvested areas met all of the Forest Plan snag management direction. Three of the units reviewed or 27 percent did meet the direction for the number of green replacement trees that should be left. In some cases there were no suitable green replacement trees left in the unit. Thirty to twenty-seven percent of the units did have suitable snags (one unit was questionable). In one instance, the silvicultural prescription called for leaving four green replacement trees per acre. However, the marking guide called for 2-3 clumps of 10-20 trees each.

In most riparian areas, timber harvest is restricted and snag retention, therefore, easily met or exceeded the Forest Plan snag management direction.

Evaluation of Monitoring Results:

Loss of suitable snags is occurring primarily on the upland portions of timber harvest units. This is due to several reasons: 1) Forest resources have not been focused on meeting snag management direction; 2) snag management direction is not easily understood nor, in some situations, realistic to implement; and 3) timber sale contracts are often difficult to interpret to assure snags and green replacement trees are retained.

Concise snag identification and marking directions to Forest Service timber marking crews must be included in the timber marking guidelines. Tree species should also be considered when identifying snags and replacement trees. Certain species such as ponderosa pine, Douglas-fir and larch are preferred species and should be chosen when possible. The quality of the tree and the likelihood of the tree surviving logging, burning, woodcutters and windthrow should also be considered.

Specific, non-contradictory timber sale contract clauses are necessary to assure snags and replacement snags are retained. Snag and replacement snag marking must be consistent and clearly described to timber sale contractors and administrators.

Threatened and Endangered Species Habitats

Monitoring Results:

Approximately 500 miles of transects (or approximately 250 acres) were surveyed to detect tracks or other physical evidence of the wolf. The U.S. Fish and Wildlife Service cooperated and assisted in an additional 200 miles of survey. Forest biologists investigated several reports of possible sightings or other evidence of wolf or grizzly bear occurring on the Forest. The U.S. Fish and Wildlife Service and the Idaho Department of Fish and Game continue as major cooperators in this effort.

Management and protection of threatened, endangered and sensitive wildlife and habitats are routinely evaluated in NEPA documents. In FY 93, no cases of "formal consultation" were required for any species.

Just over 50 acres of habitat improvement was done for threatened or endangered species. Again, improvements were directed principally at managing motorized vehicle access to improve habitat for wolf prey species (such as elk and deer).

Gray Wolf

Numerous reports over the past six years suggest wolves may occur on the Forest. Forest Service and U.S. Fish and Wildlife Service biologists are actively monitoring and investigating possible wolf sightings or sign. No conclusive evidence of an active den, rendezvous area or wolf pack has been documented on

the Forest. The highest probability of wolf occupation occurs in the vicinity of the Dixie-Red River area and the Gospel-Hump Wilderness.

Grizzly Bear

The Forest is an active participant on the Bitterroot Grizzly Bear Recovery Subcommittee. The mission of this committee is to develop a strategy for the possible recovery of grizzly bear in the Bitterroot Mountains. The Idaho Department of Fish and Game is the lead agency for the process; the Forest Supervisor serves as co-chair. Membership includes representatives from both Idaho and Montana Departments of Fish & Game. This group provides management direction to the technical workgroups. The Forest Wildlife Biologist serves as a permanent member of the Biological Workgroup. The role of the workgroup is to provide the best scientific and biological information possible. In spite of several grizzly bear reports on the Forest in FY 93, no conclusive evidence of an active den or bear(s) has been confirmed.

Peregrine Falcon

Only one active natural nest is known on the Forest. This nest is within an active timber sale and is being protected per consultations with the U.S. Fish and Wildlife Service. Two peregrine falcons fledged from that nest in 1993. A "hack site" used to rear and release young falcons into the wild was not used in 1993. Surveys of the site indicated that no peregrines returned to that "hack site" vicinity in 1993.

Bald Eagle

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	Age	1984	1986	1987	1988	1989	1990	1991	1992	1993
Salmon River: White Bird to Vinegar Creek	Adult Immature	1 0	2 0	1 0	2 1	2 0	5 0	3 0	2 0	10 5
S.F. Clearwater: Farrens Creek to Crooked River	Adult Immature	3 1	0 0	1 0	2 0	0 0	0 0	1 1	3 0	0 0
M.F. Clearwater: Clear Creek to Selway	Adult Immature	9 0	6 2	5 2	10 2	4 3	1 1	4 4	12 4	7 1
Grand Total		14	10	9	17	9	7	13	21	23

Evaluation of Monitoring Results:

The winter survey routes located on the Forest yielded 17 adults and six immature birds. Based on the local data, wintering bald eagle populations appear to be relatively stable or slightly increasing. However, variable weather conditions and the prey availability in other locations along its migration route, may account for large variations in local eagle populations. Local winter populations monitored by the Forest indicate the highest numbers are generally along the Middle Fork of the Clearwater and the lowest numbers are along the South Fork Clearwater River. Eagle numbers along the Salmon River were relatively higher in 1993. Observations by Forest employees, agencies and citizens have failed to locate or confirm any active bald eagle nests on the Forest to date.

Sensitive Wildlife and Plant Species

Direction for sensitive species is to manage habitats to maintain at least viable populations of such species and avoid actions which may cause a species to become threatened or endangered.

Monitoring Results:

A species conservation plan for the white-headed woodpecker was jointly developed and completed by the Idaho Department of Fish and Game and the Forest. A University of Idaho research project has confirmed Mountain Quail nesting on the Salmon River Ranger District. New sightings of most sensitive wildlife species were documented across the Forest in 1993.

Two Challenge Cost Share projects were completed in FY 93 with the Idaho Conservation Data Center. A multi-year monitoring program for Pacific dogwood along the Selway River continued this year.

A second project in cooperation with the Clearwater N.F. and Idaho Conservation Data Center was completed along the Selway and Lochsa Rivers. The project sampled and analyzed canyon landscapes along these low elevations rivers using rare or sensitive plants as indicators of unique habitats with maritime affinities.

Surveys and project clearances continued for the 31 plants designated by the Regional Forester as sensitive. New sightings were documented for Paysons milkvetch, candystick, evergreen kittentail, swamp onion, Oregon bluebell, bank monkeyflower and Idaho douglasia.

Long term monitoring continued on candystick. This year was the 4th year of sampling nine permanent plots on the Red River Ranger District. Individual plants are marked and tracked over time. The nine-25 sq. meter plots contained 116 plants during the summer of 1993. The monitoring is designed to track the effects of three treatments on the plant populations; control, edge and logged sites. Monitoring is planned to continue over the next 2-3 years.

Permanent transects were established this year to monitor broad-fruit mariposa on the Salmon River District and Clearwater District. Individual plants were located and marked within 160 sq. meter quadrats placed along 16 permanent transects within four sub-populations of broad-fruit mariposa. This initial year's effort located 1,038 individual plants. The objective of the monitoring is to assess the population trend of broad-fruit mariposa on the Nez Perce National Forest. Monitoring of the permanent transects will continue over the next few years.

Monitoring transects were established this year to document changes in Payson's milkvetch (sensitive) populations relative to effects of activities occurring in two timber sale areas. Baseline data from four transects will be used to detect effects of selective salvage accessed from existing roads and skid trails in the French Gulch/Blue Ribbon area. One transect will be used to compare the effects on plant populations of cable yarding trees harvested from a seedtree unit in the Sparky sale area. Monitoring transects are planned for annual reading during and immediately following harvest activities, with continued longer term monitoring occurring at three to five year intervals.

Evaluation of Monitoring Results:

Field survey and biological evaluation workloads have increased dramatically in the last five years. Evaluation and updated species information for newly listed species can cause some approved projects to undergo retroactive modifications. Review of biological evaluations indicate that Forest management practices appear to be maintaining sensitive wildlife species viability.

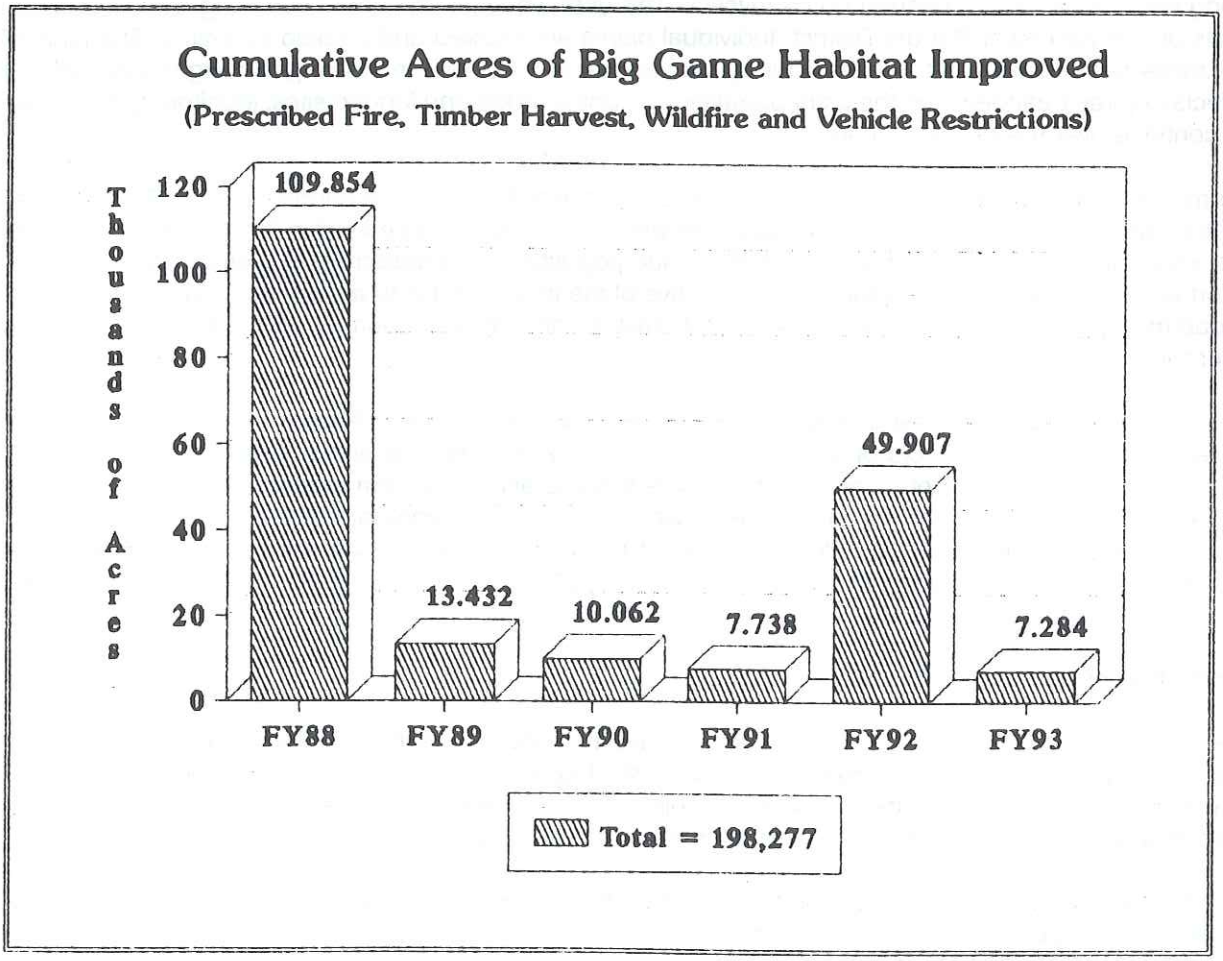
Monitoring results indicated that population trends for the dogwood continues downward due to the presents of Dogwood Anthracnose disease.

Item 1e:	Acres of Big-Game Habitat Improvement
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annually
Variability Which 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 1993, 920 acres of a 1,150 acre Forest target was accomplished with funds appropriated for wildlife habitat improvement. Habitat improvements were directed at big game summer ranges and were done primarily by restricting motorized vehicles. In addition to big game summer range improvements, approximately 280 acres of elk and deer winter range were improved through timber harvest, followed by prescribed fire. In FY93, wet weather precluded most elk and deer winter range improvement using prescribed burning. This compromised the ability of the Forest to fully meet its assigned 1,150 acres of big game habitat improvement.



Evaluation of Monitoring Results:

Approximately 15,800 acres of elk and deer winter range have been improved, using only prescribed fire, since implementation of the Forest Plan. The average annual accomplishment is just over 2,600 acres per year. This falls short of the annual target of 5,000 acres by 48 percent. The cumulative shortfall over 6 years is approximately 14,200 acres. In the settlement agreement of the Nez Perce Tribe's Appeal of the Nez Perce Forest Plan (#2226), the Forest Service and Tribe agreed to the following:

> Should the Forest fall more than 8000 acres behind on planned winter range burn acreage for any reason other than complying with Regional Forester cease burn orders for Region-wide fire emergencies, the Tribe and Forest will collaborate on a monitoring and Forest Plan amendment process. The process will explore, evaluate, and recommend alternate ways to achieve compensatory winter range forage improvement. If both parties agree that no achievable alternatives are satisfactory, they will review previous burn accomplishment records and amend the Forest Plan objective of 5000 acres proportionately downward.

The Forest is currently more than 14,000 acres short of meeting its cumulative winter range improvement targets. Although large wildfires on winter ranges have helped compensate for this shortfall, the amount of winter ranges burned by wildfire has not been determined for the Forest. Given these monitoring results, the Forest will discuss with the Nez Perce Tribe, alternatives to achieving big game winter range improvements and whether to include some acres of wildfire in the accomplishment total.

Significant reasons for the shortfall include inadequate funding, weather conditions and higher costs for environmental analysis and project planning. Given current and projected wildlife habitat management budgets, the Forest will be able to accomplish far less than 50% of the annual winter range improvement target using prescribed fire. In some circumstances, winter range improvements may be deferred and project funding directed to improving elk security and/or reducing bull elk vulnerability during hunting season.

Item 10:	Population Trends of Indicator Species--Wildlife
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	3 to 5 years (FY 1990 to 1993)
Variability Which 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 nongame and T&E species for which data is currently limited, can only be determined after sufficient baseline population data is collected. Several years of population data must be collected before variability thresholds can realistically be determined.

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

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. These surveys yield estimates of herd size, productivity, sex and age ratios, and hunting season survival. Favorable trends include increasing counts, from a condition of low herd numbers, to stable counts, when desirable herd counts are present. Downward trends are not desirable. The Idaho Department of Fish and Game use the "Elk Sightability" censusing method, developed in north central Idaho.

Monitoring Results:

Winter census surveys since 1988 have yielded the following results:

Elk Population Estimated by Sightability*						
UNIT [1]	1988	1989	1990	1991	1992	1993
15	---	---	856 +/- 81	---	---	1236 +/- 310
16	---	---	818 +/- 122	---	---	1432 +/- 156
16A	1028 +/- 261	---	---	961 +/- 201	---	---
17	4506 +/- 535	---	---	3783 +/- 279	---	---
19	---	1467 +/- 37	---	---	1497	---
20	---	1044 +/- 48	---	---	1237 +/- 61	---

*Represents total population estimate of animals on the winter range of each unit.

1 Idaho Department of Fish and Game, Big Game Management Unit

Bull:Cow Ratios (Bulls per 100 Cows)							
Unit	Objective [1]	1988	1989	1990	1991	1992	1993
15	>20	---	---	20 +/- 5	---	---	11 +/- 5
16	>20	---	---	10 +/- 5	---	---	22 +/- 4
16A	>25	35 +/- 14	---	---	23 +/- 8	---	---
17	>25	26 +/- 5	---	---	22 +/- 3	---	---
19	>25	---	21 +/- 2	---	---	17 +/- 2	---
20	>25	---	26 +/- 4	---	---	31 +/- 5	---

1/ Idaho Department of Fish and Game, 5 year Elk Management Plan Objective (1991 to 1995); expressed as number of bulls per 100 cows.

Calf:Cow Ratios (Calves per 100 Cows)						
Unit	1988	1989	1990	1991	1992	1993
15	---	---	39		---	43 +/- 17
16	---	---	16		---	21 +/- 4
16A	32	---	---	30	---	---
17	27	---	---	24	---	---
19	---	24	---	---	32	---
20	---	22	---	---	34	---

Evaluation of Monitoring Results:

The above data represent only two data points per big game management unit, for each of the three elk population monitoring components.

Mild winters, varying degrees of hunter success (influenced largely by hunting season weather conditions) can significantly affect population data within any given hunting unit. In addition, the change in the elk tag system by the Idaho Department of Fish and Game, has probably influenced hunter distribution.

Moose

Monitoring Results:

Moose populations are not surveyed by the Idaho Department of Fish and Game with any techniques capable of making accurate population estimates.

Evaluation of Monitoring Results:

Moose populations appear to be stable, based on incidental information and sightings. Although locally common, nowhere on the Forest are moose populations considered high.

Bighorn Sheep

Monitoring Results:

Bighorn Sheep Total Counts				
Unit	1991	1992	1993	1994 (Spring)
17	52	---	---	28
19	---	52	60	---
20	---	106	66*	---

*(Incidental count, may not be complete.)

Evaluation of Monitoring Results:

Bighorn sheep populations in Units 17, 19 and 20 appear to be stable. An outbreak of Pasteurella haemolitica, a pneumonia-like disease which began in 1984, initiated a population decline in Unit 18. A second outbreak of the disease in 1991 further impacted the population in Unit 18. The disease is being tracked and studied by Dr. Dave Hunter of the IDFG laboratory in Caldwell.

Pileated Woodpecker
Monitoring Results:

Due to lack of funding, none of the five permanent pileated woodpecker survey routes were sampled during FY93. A summary of five years of data is displayed below for pileated woodpecker.

Pileated Woodpecker Relative Abundance Index

Year	1988	1989	1990	1991	1992	1993
Totals	9	9	6	13	6	No Survey

Evaluation of Monitoring Results:

Highly variable results indicate sampling size should be increased in an effort to improve sampling reliability. The sampling data suggests pileated woodpecker populations are relatively stable; year to year variability in numbers of birds sampled is not considered unusual.

In 1994, the Forest will implement, as part of a Northern Region strategy, an annual survey of fixed transects to determine trends in neotropical migratory birds. These surveys will augment the pileated woodpecker fixed transect surveys.

Pine Marten/Fisher

Monitoring Results:

Due to budget reductions, no fisher/pine marten transect miles were monitored in FY 93.

Evaluation of Monitoring Results:

Difficulty in making positive identification of fisher verses pine marten tracks has complicated results. Based on the data collected to date, no trend in populations of either species can be concluded. Based on a local study (Jones, J. 1991. Habitat Use of Fisher in Northcentral Idaho, M.S. Thesis, University of Idaho - available at Nez Perce National Forest Headquarters Office), populations may be as much influenced by trapping as by changes in habitat. Consistent annual reading of transect routes may produce more useful data.

Goshawk

Monitoring Results:

In FY 93 substantial survey efforts to detect active goshawk nests occurred in the Cove and Mallard areas of the Red River District, but none were found. Three active nests discovered on the Salmon River District in FY 92 were revisited in FY 93 but did not appear active. No conclusions can be drawn for these nests because goshawks often alternate nest sites within a single nesting territory. One new nest was discovered

on the Selway District in FY 93. The Selway District nests discovered in FY 92 were not revisited in FY 93. Several sightings of goshawks were reported in FY 93.

Efforts to detect goshawk nests yielded one new nest site in 1993. Forest wildlife biologists have begun to realize that the time, money, and personnel resources to adequately monitor this species are greater than predicted. Fiscal Year '92 was the first time active nests were discovered on the Forest.

Evaluation of Monitoring Results:

Lack of sufficient dollars and staff time has limited the Forest's ability to adequately gather information upon which to estimate population trends. Goshawk population monitoring is based on monitoring nest activity and success within individual nesting territories.

Item 11:	**Validation of Resource Prediction Models: Wildlife**
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	2 to 5 years (FY 1989 to 1993)
Variability Which 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. 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 guidelines.

Discussion:

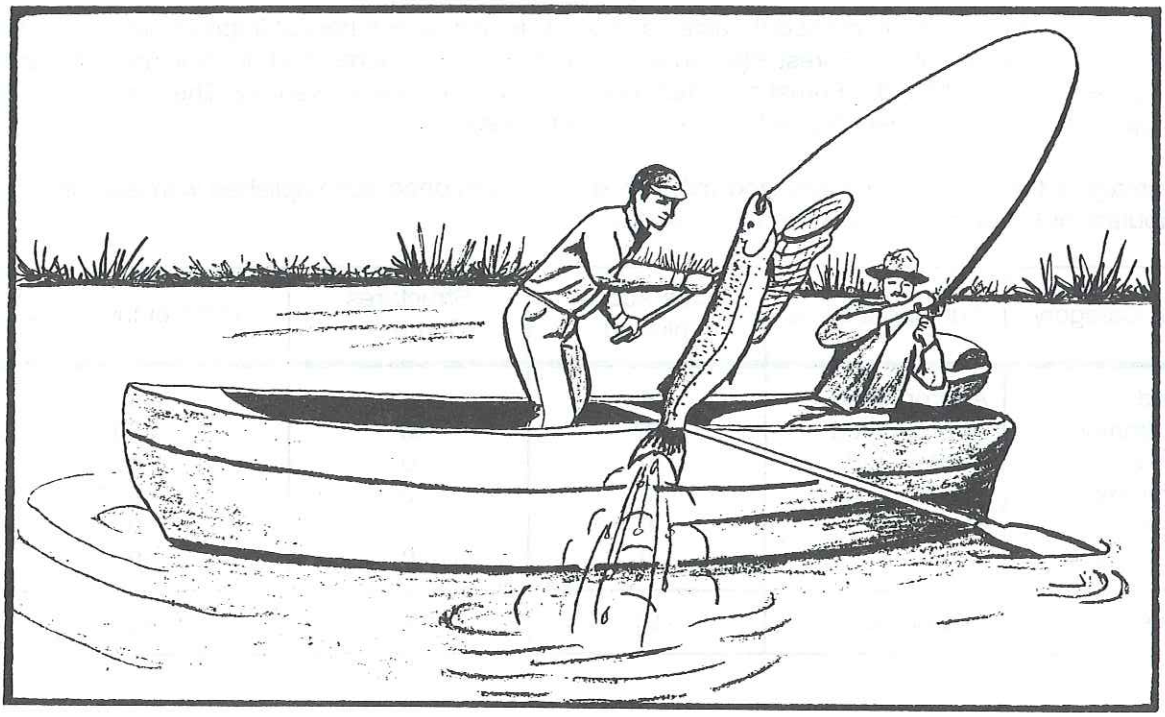
Changing elk management issues and the influences of new access vehicles are not properly addressed by the current summer elk habitat effectiveness guidelines.

The Forest is actively participating in a cooperative effort to evaluate and offer recommendations to update the elk summer habitat guidelines. Wildlife Biologists and agency managers from the IDFG, Nez Perce Tribe, Clearwater National Forest and Nez Perce National Forest are involved in the inter-agency Venture 20 effort. Biologists are reviewing the elk model methodology for applicability and consistency. Possible changes may include: 1) limiting application of the elk summer range model to post-winter, pre-hunting season period; 2) reducing the influences of security area during the summer; and 3) accounting for motorized trail use.

Elk security area needs during hunting season may be separately addressed with an Elk Vulnerability Model that is being explored and tested concurrently by the same interagency group.

A Forest Plan amendment process with public input will be used if considered elk modifications in the Forest Plan are formally proposed as a result of these interagency cooperative efforts.

FISH



Item 1f:	Fish Habitat Improvements--Numbers of Acres and Structures
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	+/- 10% of Plan targets within a decade.

Monitoring Results:

Fish habitat improvements are reported as the number of structures and acres of improvements accomplished. Fish habitat structures include structures used to provide fish cover, feeding, and rearing habitat (e.g., log check dams, rock v-berms, boulder clusters, stumps, side channel improvements), to improve fish habitat by reducing bank or channel erosion (e.g., gabions, log deflectors, rock riprap), and to provide or improve fish passage (e.g., fish ladders). Acres of habitat improvement refers to nonstructural habitat

improvements that benefit fish. This includes the improvement or establishment of spawning and rearing habitat through gravel placement or cleaning, stream bank stabilization, riparian vegetation restoration, and the number of acres of fish habitat made available to fish by removal of barriers to fish movement.

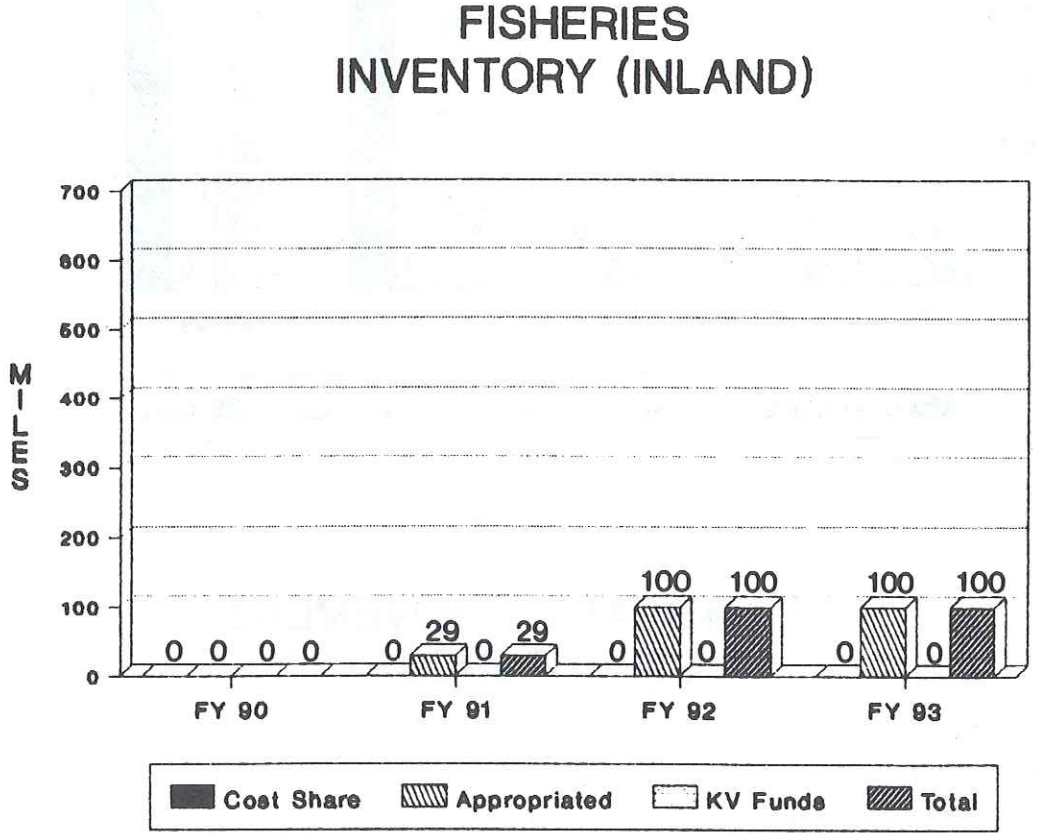
Beginning in fiscal year 1990, habitat improvement dollars allocated to the Forest were broken out for anadromous and inland fisheries; prior to 1990 these funds were combined. For each mile of stream surveyed, one acre of accomplishment was reported.

During 1993 the Forest accomplished 91 acres and 66 structures of fish habitat improvement work. This amounts to 38 percent of the Forest Plan annual projection of 410 acres and/or structures of habitat improvement. Also in 1993, the Forest accomplished 621 miles of stream inventory. The Forest Plan did not project an accomplishment figure for miles of stream inventory.

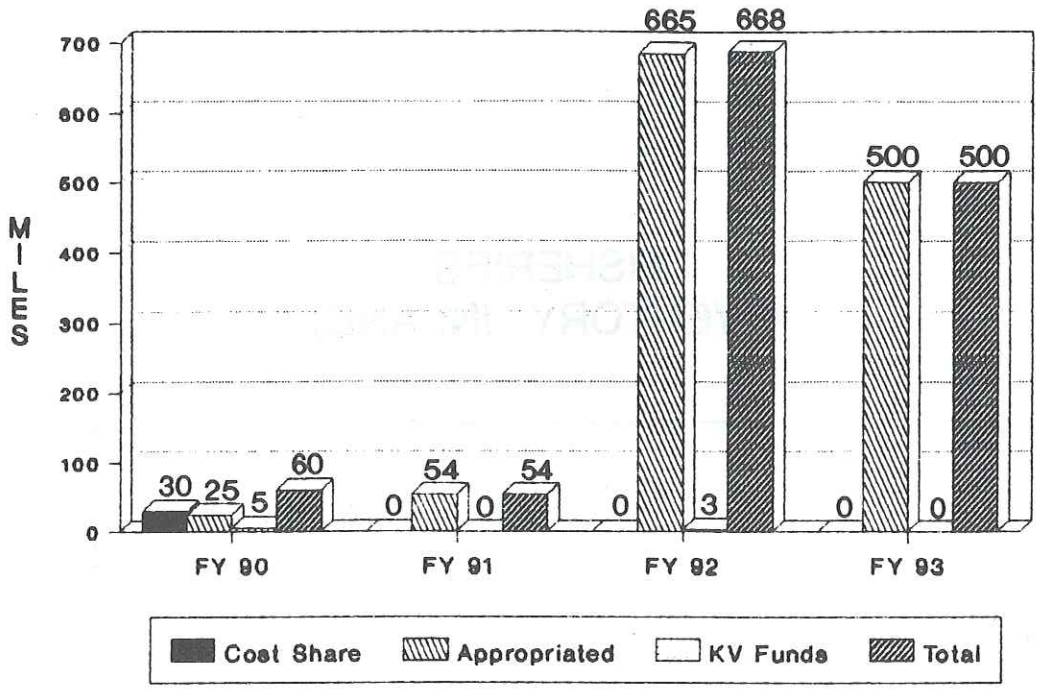
A summary of the acres, structures, and miles of stream inventoried accomplished with appropriated, contributed, or KV dollars is shown in the following table.

Fish Category	Funding Source	Acres Accomplished	Structures Complete	Miles of Inventory
Inland	Appropriated	4	9	121
Anadromous	Appropriated	87	57	500
Inland	Contributed	0	0	0
Anadromous	Contributed	0	0	0
Inland	KV	0	0	0
Anadromous	KV	0	0	0
Totals	All Sources	91	66	621

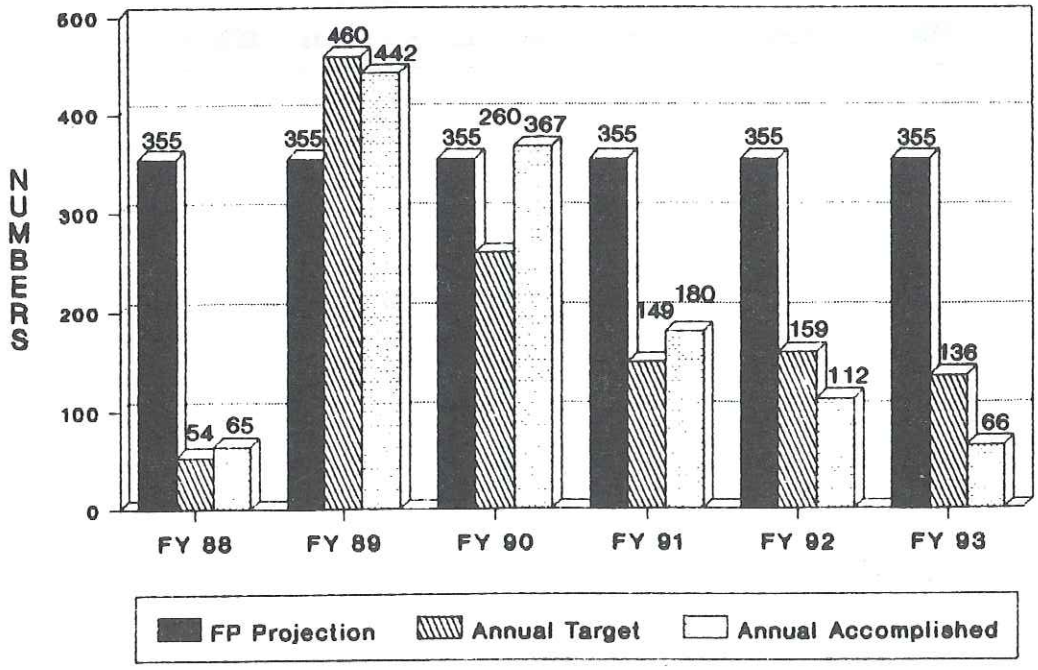
A breakdown of the number of structures, acres, and miles of inventory accomplished by funding source for fiscal years 1988, 1989, 1990, 1991, 1992, and 1993 is shown in the following graphs (inventory information is available for 1990, 1991, 1992, and 1993 only).



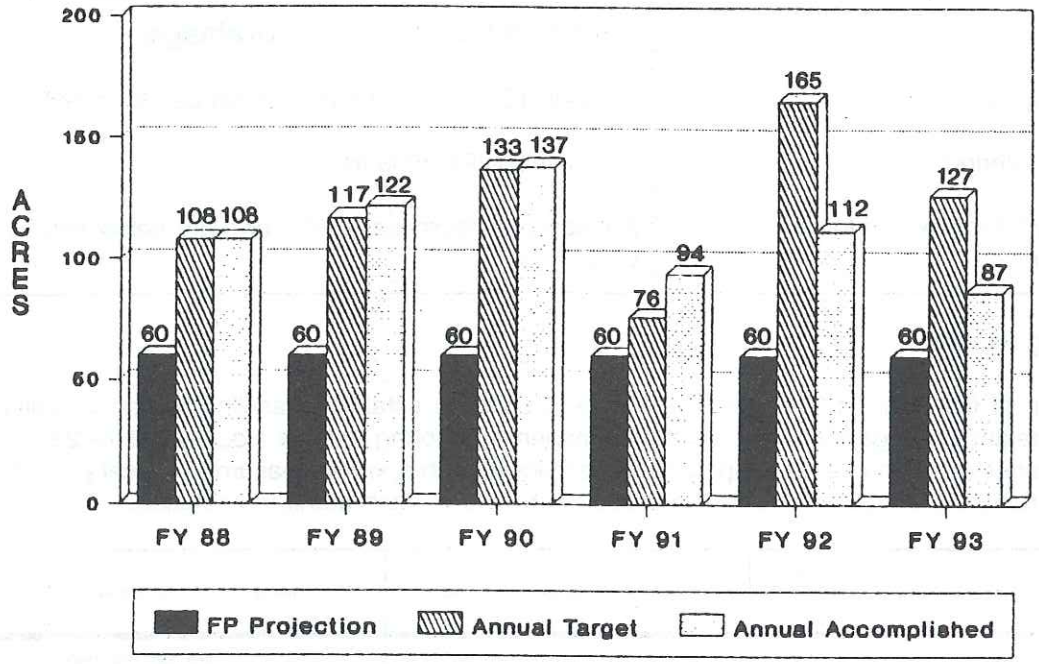
FISHERIES INVENTORY (ANADROMOUS)



FISH HABITAT IMPROVEMENT STRUCTURES



FISH HABITAT IMPROVEMENTS NONSTRUCTURAL



On May 22, 1992, spring/summer and fall chinook salmon in the Salmon River drainage and fall chinook salmon in the Clearwater River were listed as "threatened" under the Endangered Species Act. As a result of the listing and our role as a Federal Agency under the Endangered Species Act, the Forest's time has been focused on better understanding how Forest activities have affected the chinook salmon. As a result, not all habitat improvement targets were accomplished, and monitoring of habitat improvement projects did not occur at the level we'd like to improve our understanding of these projects.

The best Forest evaluation concerning the response of fish populations to habitat improvement structures was evaluated in Crooked River. These results were included in the 1991 and 1992 reports. The following is a summary of the results considered to be important to fish habitat management on the Nez Perce Forest:

- The highest number of juvenile wild steelhead trout were observed in pocket water and the lowest number were found in riffle habitats. Proper management of habitat for the summer rearing of juvenile wild steelhead trout might include the creation of more pocket water habitats with less emphasis on pool-creating structures.
- Data is needed on the winter habitat utilization for **all** salmonid species on the Forest to allow for a complete assessment of the benefits resulting from the placement of pool-creating structures. It is possible that deep plunge pools are important for winter-rearing habitat.

Evaluation of Monitoring Results:

The monitoring of the structural and non-structural improvements and their effectiveness has not been a priority for the forest and thus the results have not been compiled and analyzed. Increased work loads due to the listing of the chinook salmon under the Endangered Species Act resulted in less time available to conduct the necessary analysis to evaluate these improvements. Forest priorities should reflect the need for acurate evaluation of the existing data and methodology and adjustments made where appropriate.

Item 2e:	**Fish Habitat Trends by Drainage**
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	1 to 5 years (FY 1988 to 1992)
Variability Which Would Initiate Further Evaluation:	A measured decrease of 10% or more below established objectives

Monitoring Results

A minimum of five years of data are necessary in order to establish baseline habitat conditions and determine relative change in condition at the permanent monitoring stations. Fourteen of the 23 permanent Forest fisheries monitoring sites, displayed in the following table, were measured in fiscal year 1993. The table summarizes the type of information collected to date at each monitoring station.

Permanent Monitoring Station Name	Site Surveyed in FY 93	Years Having Habitat Survey Data	Years Having Fish Density Estimates	Habitat Map of Site Available?
N.Fk.White Bird Creek*	Yes	1988,1989,1990,1993	1988,1989,1990,1993	Yes
S.Fk.White Bird Creek	Yes	1988,1989,1990,1993	1988,1989,1990,1993	Yes
N.Fk.Slate Creek*	Yes	1988,1989,1990,1993	1988,1989,1990,1993	Yes
Little Slate Creek	Yes	1988,1989,1990,1993	1988,1989,1990,1991,1993	Yes
Johns Creek*	Yes	1987,1988,1989,1990,1991	1987,1988,1989,1990,1991,1993	Yes
North Meadow Creek	Yes	1988,1989,1991	1988,1989,1993	Yes
N.Fk.Red River Upper*	No	1988,1989,1990	1989,1990	Yes
N.Fk.Red River Lower*	No	1989,1990	1989,1990	Yes
Trapper*	No	1988,1989	1989	Yes
S.Fk./W.F.Red River[1]	No	1988,1989,1990		Yes
Upper Big Mallard Cr.[2]	Yes	1987,1989,1990,1991,1993	1989,1990,1991,1993	Yes
Running Creek*	No	1988,1989,1990	1988,1989,1990	Yes
Bear Creek*	No	1988,1989,1990	1988,1989,1990	Yes
O'Hara Creek	No	1988,1989,1990,1991	1988,1989,1990,1991	Yes
Gedney Creek	No	1989,1990,1991	1989,1990,1991	Yes
Meadow Creek Lower[3]*	Yes	1988,1989,1990,1991,1993	1988,1989,1990,1991,1993	Yes
Meadow Creek Middle[4]*	Yes	1990,	82-83,87-88,1990,1993	Yes
Sable Creek	Yes	1987,1988,1990,1993	1983,1987,1988,1990,1993	Yes
Butte Creek	Yes	1987,1988,1990,1993	1987,1988,1990,1993	Yes
Tenmile Creek*	Yes	1988,1990,1993	1988,1990,1993	Yes
Lower Crooked River*	Yes	1988,1990,1993	1988,1990,1993	Yes
Lower Newsome Creek*	Yes	1988,1990,1993	1988,1990,1993	Yes
Upper Newsome Creek*	No	1988,1990	1988,1990	Yes

*Stream also monitored by Idaho Dept. Fish and Game (IDFG) for population densities.

[1] These stations were dropped from Forest Plan (amended in FY 88), but a channel and substrate survey was conducted in cooperation with Intermountain Research Station personnel.
[2] This station is incorrectly called "Slide Creek" in the Forest Plan, after the Slide Creek Sale. Actual site is on Big Mallard Creek. It is being used to monitor a road crossing. The Forest Plan will be amended to reflect this name change.
[3] Station location moved upstream 100m in 1989 to a location with a better diversity of habitat.
[4] Only fish populations are sampled at this station.

In 1992, three baseline monitoring stations were established in McComas Meadows to better address the concerns related to grazing and the recovery of the system following the removal of the livestock. These stations were also monitored in 1993. Part of the effort in establishing these permanent stations involved gathering and documenting data relating to bank profiles and channel morphology in order to study the system changes with time.

Evaluation of Monitoring Results:

Permanent Forest fisheries monitoring sites were established to monitor general fisheries habitat condition across the Forest (Forest Plan, 1987).

Preliminary data analysis indicates there are budgeting, managerial, and technical issues that are compromising the quality and, therefore, the usefulness of the data. Monitoring is given a low priority due to the mix in tasks that District biologists must accomplish. As a result, monitoring has not received adequate funding and the necessary analysis of the data has not been accomplished.

Nine of the permanent Forest fisheries monitoring sites (see previous table) were not measured in 1993 due in part to increased workloads related to the evaluation of on-going management activities on the Forest to assess their effect on chinook salmon, as required under the Endangered Species Act.

Although it was to be accomplished at the District level, the data collected at the monitoring stations has not been summarized. Furthermore, data was supposed to be collected for a minimum of five consecutive years at a particular monitoring station in order to establish a baseline habitat condition. Organization to determine which permanent monitor stations would be measured each year has been lacking; therefore, data has not been collected consistently. Planning and collecting monitoring data has received low priority due to the workloads associated with Endangered Species Act (ESA)consultation for timber sale and other proposed and ongoing activities. Most stream survey data must be collected during base flows, so a limited amount of time is available to accomplish all stream survey work. One solution to accomplish consistent collection of data at monitoring stations would be to have a field crew specifically for monitoring stations across the Forest. A lot of the data that has been collected in the past is inconclusive in determining a baseline habitat because data collection methodologies have varied from year to year.

Four permanent monitoring station have had five years or more of data collection. They are Little Slate Creek, Johns Creek, Meadow Creek Lower, and Sable Creek. There are large variations in such parameters as acting debris, potential debris, pool quality, and instream cover. These inexplicable variations cannot be rationalized by changes in habitat condition and must be attributed to changes in methodology or erroneous data collection in the field. As a result of the inconsistencies in methodology, the usefulness of the data is limited, and determining any valid results is inconclusive.

STREAM SURVEYS:

Basinwide Surveys -- The following systems were surveyed using the Basinwide Stream Survey technique (Nez Perce National Forest Basinwide Survey Methodology, 1991): Asbestos Creek, Colds Springs Creek, Corduroy Creek, Fish Creek, Goodwin Creek, Jungle Creek, South Fork Whitebird Creek, Tepee Creek, Twin Cabins Creek, Tollgate Creek, portions of American River and Crooked River, Brown Springs Creek, Pine Knob Creek, Clear Creek, Middle Fork Clear Creek, Big Mallard Creek, South Fork Big Mallard Creek, Noble Creek, Grouse Creek, Jack Creek, Bat Creek, Little Mallard Creek, Rabbit Creek, Rhett Creek, and Jersey Creek.

Data from these surveys has been, and will continue to be utilized in conjunction with analyses associated with Section 7 watershed consultation, and other related NEPA commitments.

Item 2p:	Impact of Management Activities on the Chinook Salmon
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	

Discussion:

On May 22, 1992, the spring/summer and fall chinook salmon in the Salmon River drainage and the fall run chinook salmon in the Clearwater River were listed as "threatened" under the Endangered Species Act.

As a result of the listing of the chinook salmon, Forest biologists have shifted their emphasis to the work required to complete the Section 7 consultation process.

To facilitate the consultation effort with National Marine Fisheries Service (NMFS), the Nez Perce Forest was divided into seven analysis watersheds. These watersheds were delineated to enable a cummulative effects analysis for all on-going and proposed activities on the Forest. These watersheds include: main Salmon Tributaries Northeast, Main Salmon Tributaries Northwest, Rapid River/Little Salmon, Lower Salmon, South Fork Clearwater, Middle Fork Clearwater/Clear Creek, and Selway River (see map at end of this section). To facilitate the salvage of timber from wildfires, two individual salvage sale packages, Scott Salvage and Selway Salvage, were also submitted to NMFS.

Of the analysis packages completed, both salvage sales and the Main Salmon River Tributaries Northwest documents have had concurrence with NMFS. The Main Salmon River Tributaries Northeast has been submitted and is awaiting consultation. Three other packages, Selway River, South Fork Clearwater River and Lower Salmon River are currently ongoing and are expected to be submitted to NMFS in the near future.

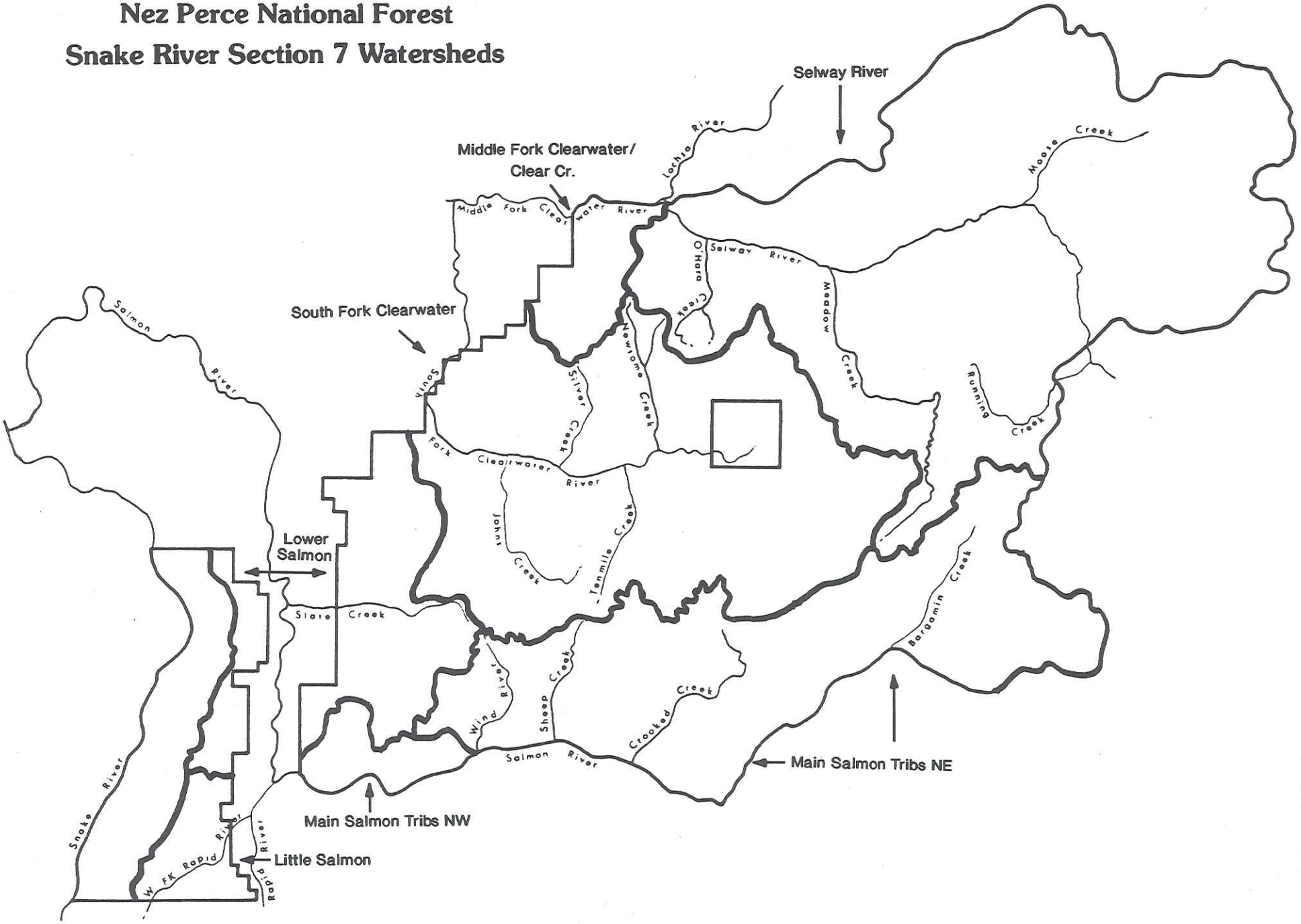
The following table summarizes the status of the Section 7 consultation process on the Forest.

SUMMARY OF SEC 7 CONSULTATIONS WITH NMFS - NEZ PERCE N.F.

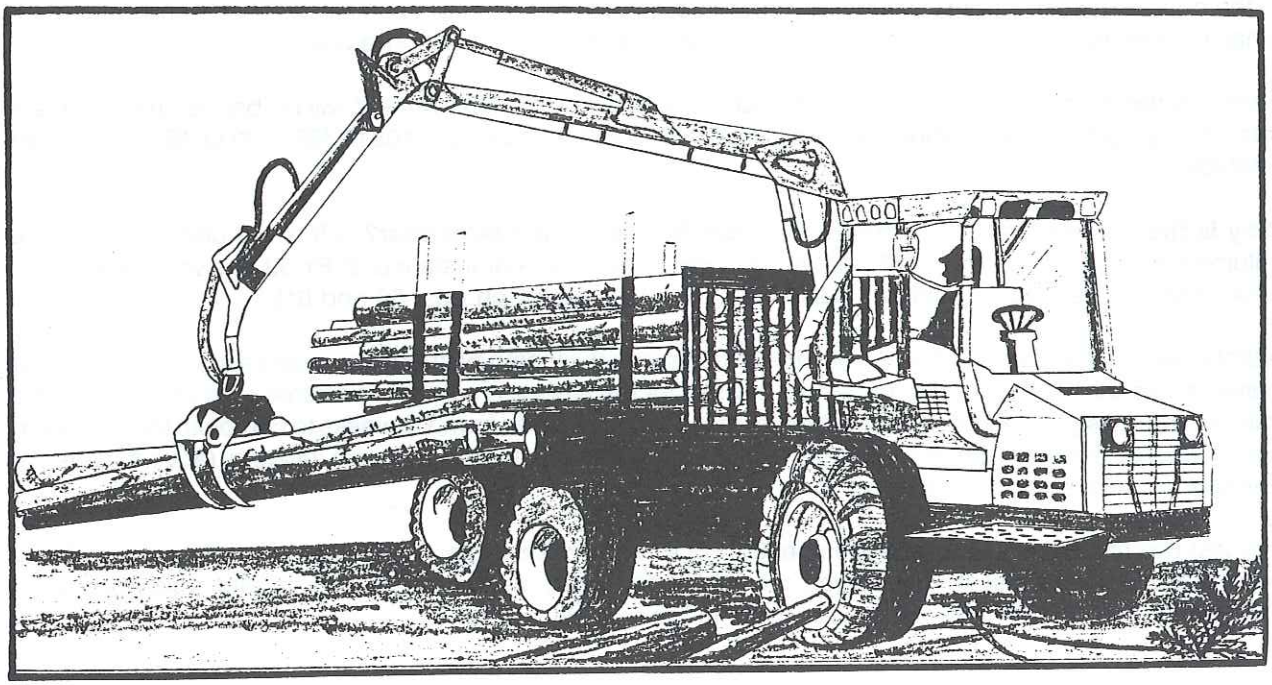
FORESTS/SEC. 7 WATERSHED OR PROJECT *	DATE BA SENT TO NMFS	STATUS AT NMFS	COMMENTS
Main Salmon River Trib NW	7-12-93	Completed	Concurrence 10-1-93 (82 days)
Main Salmon River Tribs NE	2-9-94	Being Reviewed	Scheduled to be Completed by 6-24-94
Selway River			(Due 6/15/94)
South Fork Clearwater River			(Due 8/15/94)
Lower Salmon River			(Due 12/15/94)
M.F. Clearwater/Clear Creek			(Due 6/30/95)
Rapid River/Little Salmon			(Due 3/30/95)
Million $ Placer Project	6-12-92	Completed	Concurrence 6-30-92 (18 days)
Scott Salvage Project	6-22-93	Completed	Concurrence 7-9-93 (17 days)
Selway Salvage Project	8-20-93	Completed	Concurrence 9-7-93 (18 days)
Castle Creek Rehab Project	11-23-93	Completed	Concurrence 3-29-94 (52 days)
Salmon R. Seed Orchard	4-14-94	Review Pending	

* Sec 7 Watershed Assessments are in Bold type

Nez Perce National Forest
Snake River Section 7 Watersheds



TIMBER



Item 1h-1:	Allowable Sale Quantity (ASQ) Sold By Components
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annually
Variability Which 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 (Forestwide Management Direction) and Chapter 3 (Management Area Direction) may necessitate a Forest Plan Amendment.

Discussion:

The allowable sale quantity (ASQ) is defined as the maximum timber volume that may be sold during the planning period from the suitable land base. The ASQ is a sold-volume ceiling, and is monitored yearly against the average annual ceiling of 108 MMBF chargeable volume. This chargeable volume is divided into two components: regular (green live and recently dead resulting from insect/ disease or fire) and noninterchangeable (pulp/cedar products and endemic mortality). Nonchargeable volume is not considered as part of the ASQ when it is sold, since this component was not used in calculating the ASQ. Products that are included in the nonchargeable component include: firewood, volume removed from unsuitable lands and volume too small or defective to meet Regional utilization standards such as post and poles.

Although this item is monitored on an annual basis, actual ASQ achievement will be based on the decade total. Yearly figures may be above or below the Forest plan ASQ ceiling of 108 MMBF (103 MMBF regular and 5 MMBF noninterchangeable).

Why is the Volume Sold and Offered Different for the Same Fiscal Year? -- It is not uncommon for the volume sold and offered to be different in the same fiscal year. For instance, in FY 93, the volume sold was 42.4 MMBF and the volume offered was 34.5 MMBF (see tables on pgs. 58 and 61).

A timber sale is considered offered when it is advertised in the local newspaper. In most cases, 30 days elapse between this advertisement and the actual bidding for the timber. A sale is considered sold when the timber sale contract is signed by the qualified high bidder. Usually, it takes from 1-3 weeks to complete the necessary work required prior to signing the contract. Thus, the time between the sale offering (advertisement in newspaper) and selling (contract signing) is normally 40 to 50 days.

The last day of the fiscal year is September 30. For a variety of reasons, most sales on the Forest are offered near the end of the fiscal year. Given the 40-50 day delay period, sales offered after mid-August are considered offered in one fiscal year and sold in the next fiscal year.

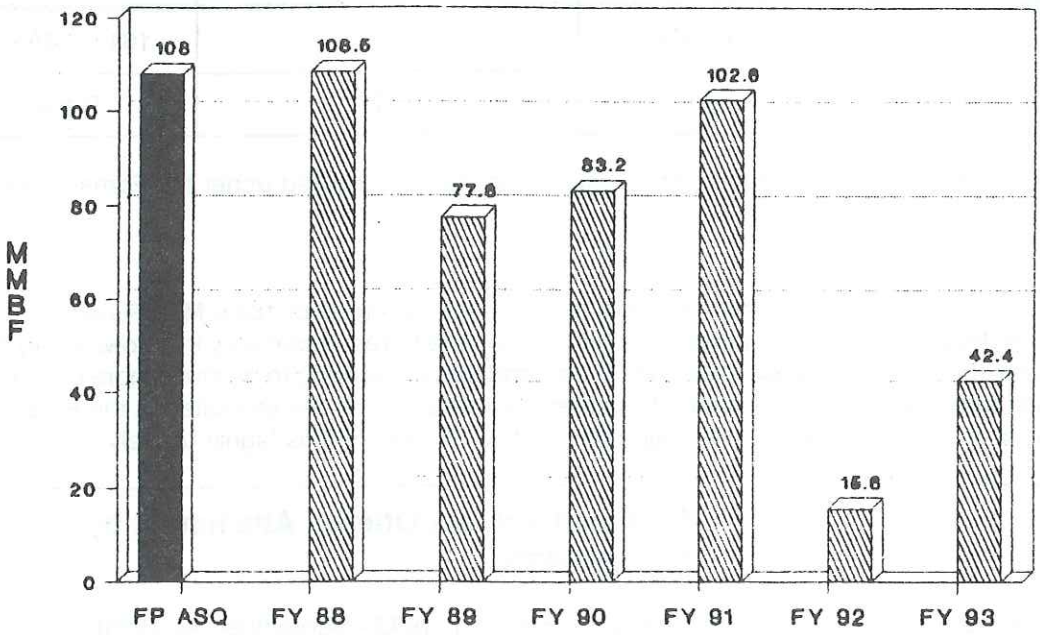
Monitoring Results:

CHARGEABLE VOLUME SOLD IN FY 1988-1993[1]
(Volume Credited Toward ASQ on an Annual Basis)

Components	Volume (MMBF)					
	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93
Regular	104.8	68.9	70.2	94.3	1.3	32.1
Noninterchangeable (NIC)						
Pulp	1.3	7.6	10.3	4.8	14.2	10.2
Cedar Products	2.4	1.1	2.7	3.5	0.1	0.1
Total	108.5	77.6	83.2	102.6	15.6	42.4

[1] The ASQ accomplishment breakdown was based on the Nez Perce Periodic Timber Sale Accomplishment Report accumulated as of September 30, 1993 (fiscal year summary).

CHARGEABLE VOLUME SOLD BY YEAR (FY 1988-1993)



The scheduled 5-year review of the Forest Plan started in fiscal year 1993. Six years of sold sale monitoring have shown that the Nez Perce has sold 79 percent of the scheduled acres, which contained only 66 percent of the average annual ASQ volume. There are very strong indications that the timber yield estimates (volume/acre) contained in the Forest Plan were overestimated **(see Table 11-a)**. This issue will be addressed in the Forest Plan review.

Analysis of the two ASQ components on the Forest (regular green and non-interchangeable) shows that in the first half of the decade the Forest has sold 60 percent of the sawlog component and 194 percent of the non-interchangeable (NIC) component (pulp and cedar products).

In fiscal year 1993, the Forest sold 3.3 MMBF of the nonchargeable component (not counted as part of the ASQ). This was primarily firewood (both commercial and personal use) and post/pole material.

ASQ VOLUME SOLD TO DATE

Avg. Annual ASQ	1993 Chargeable Volume Sold	Total Chargeable Volume Sold to Date*	% of Avg. Annual ASQ Sold for 6 Years
103.0MM/year (sawlogs)	32.1MM	371.6MM	60
5.0MM/year (pulp/cedar prod)	10.3MM	58.3MM	194
108.0 MM/year (total)	42.4 MM	429.9 MM	66

* In fiscal years 1988-1993, which are the first 6 years of the decade covered under the Forest Plan.

FUTURE ASQ SELL REQUIRED TO MEET DECADAL CEILING

Total Decadal ASQ Ceiling	Total Chargeable Volume Sold to Date*	% of Decadal Ceiling	FY 94-97 Avg. Annual Sell Required to Meet ASQ
1,030MM (sawlogs)	371.6MM	36	164.6MM/year
50MM (pulp/cedar prod)	58.3MM	117[1]	None

* In fiscal years 1988-1993, which are the first 6 years of the decade covered under the Forest Plan.

Evaluation of Monitoring Results

In order to meet the decadal ASQ ceiling, the Forest must offer an average of 164.6 MMBF/year during the last 4 years of the decade. The timber management section on the Forest is currently in a downsizing mode. Timber funding is expected to decrease. Other resource standards are proving to be much more constraining on timber harvest than originally anticipated. We suspect that selling the full first decade ASQ is highly unlikely.

Item 1h-2:	**Financed Volume Offered Attainment by Components**
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	

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:

1. 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 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. Nonchargeable offered volume (firewood and posts/poles) may be included in "timber target" achievement. The ASQ volume does not include nonchargeable volume.

Monitoring Results:

CHARGEABLE AND NONCHARGEABLE VOLUME OFFERED IN FY 1988-1993

	Volume (MMBF)					
	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93
Assigned Target	103.0	108.0	104.0	100.0	77.0	66.0
Accomplishment (Volume Offered)[1]	104.6	107.7	84.5	86.9	49.8	34.5
% of Accomplishment	102	99	81	87	65	52

[1] Target accomplishment based on yearend Periodic Timber Sale Accomplishment Report (PTSAR) taken from the STARS database yearend summary.

Evaluation of Monitoring Results:

The Forest was financed to offer 93.0 MMBF/year during the first 6 years of the decade. Actual accomplishment was 78.0 MMBF/year (84 percent of assigned timber target).

In FY 93, the Forest fell short of meeting its financed timber target by 31.5 MMBF. Reasons for the target shortfall are shown below:

95% - Sales delayed because of circumstances related to the threatened listing of salmon

5% - Miscellaneous delay reasons
- Unresolved road right-of-way dispute
- Poor economics of sale

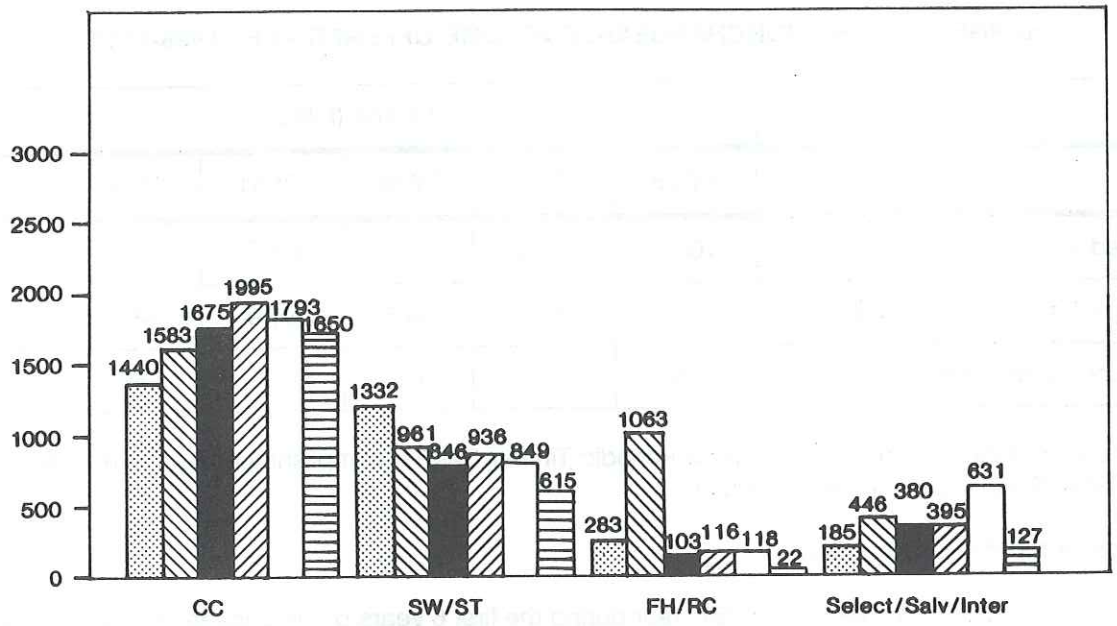
Due to reductions in timber and timber-related funding, future financed "timber targets" are not expected to increase. The FY 94 financed "timber target" on the Nez Perce is tentatively 66MMBF. For the period FY 95-97, the Forest expects timber funding sufficient to offer between 40-60 MMBF per year.

Item 1i:	**Acres Timber Harvested by Method (Includes Precommercial Thinning)**
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	Unacceptable results of an interdisciplinary review.

Monitoring Results:

Precommercial thinning occurred on 1,205 acres which is approximately 121 percent of planned accomplishments. Harvesting took place on 2,414 acres (68 percent clearcut, 25 percent seed and prep cut from shelterwood and seed tree, and 7 percent from other cutting methods). It should be noted that harvest acres represent the acres actually harvested in FY 93, and do not necessarily correspond to acres sold. Most sales have a contract life of from 2-6 years. It is likely that some of the harvested acres may have come from sales sold as early as 1987, which was prior to Forest Plan implementation.

Acres Harvested By Method
FY 88 – 93



FY 88 — 3,240 total
FY 89 — 4,053 total
FY 90 — 3,004 total
FY 91 — 3,442 total
FY 92 — 3,391 total
FY 93 — 2,414 total

6 Year Average = 3,257 acres/year

CC = Clearcut

SW/ST = Shelterwood and seedtree prep or seed cut

FH/RC = Shelterwood and seedtree removal or final harvest cut

Select = Selection cuts (uneven aged management)

Salv = Salvage/sanitation cuts

Inter = Commercial thin, improvement, liberation, special cuts, and other

Evaluation of Monitoring Results:

Some harvested acres are from sales sold before Forest Plan implementation and are reflective of market conditions and were not subject to Forest Plan standards when sold. This partially explains the number of clearcut acres harvested. Since the total volume under contract is more than double the average yearly harvest volume, actual harvest acres are, in part, a reflection of market conditions.

Item 2f:	Vegetative Response to Treatments
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	5 years (FY 1992)
Variability Which Would Initiate Further Evaluation:	Data and analysis which would indicate that projected yields from regenerated stands are in error.

Discussion:

Permanent growth plots provide a means to assess and predict the results of silvicultural treatment. Their primary function is to assess the accuracy of yield tables in the linear programming model for forest planning. These yield tables were built using Prognosis, a stand growth simulation model. Since 1979, 60 permanent plots have been established (in the 1991 Monitoring Report, 71 plots were reported, but 11 did not contain sufficient data clusters to continue monitoring). Thirty-five of these plots have been remeasured. Most of these growth plots have been established in regenerated stands following clearcut or shelterwood harvest. Many have been thinned to stocking levels consistent with stocking levels in Forest Plan regenerated yield tables.

Nineteen permanent growth plot stands were remeasured in 1993. Nine of these were remeasurements representing at least 10 years of growth since plot establishment. Data entry and analysis of comparisons of growth projections with measured growth of these managed stands is underway.

Evaluation of Monitoring Results:

Seven of the 9 stands remeasured last year were approximately 20 years old at time of growth plot establishment ten years ago. Per acre values of basal area (BA), dominant height (HT), merchantable cubic foot (CF) and board foot (BF) volumes at remeasurement were compared to Forest Vegetation Simulator (FVS-formally Prognosis) projects at time of establishment. The following table compares these summaries:

	YEAR	AGE	BA	HT	CF	BF
Installation	1983	20	23	26	72	268
Projection	1993	30	65	42	676	2306
Remeasure-ment	1993	30	65	43	742	2539

Forest Vegetation Simulator projects appear to be reasonably close to measured growth for the stands analyzed so far. Additional remeasurements are being analyzed (early 1994) and will be summarized by productivity class and treatment type (some of the management stands have been precommercially thinned) and comparisons made to Forest Plan yield tables.

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, 1992 - September 30, 1993)
Reporting Period:	5 years
Variability Which Would Initiate Further Evaluation:	Significant deviation from 5-year regeneration period after data is reviewed by an interdisciplinary team.

Discussion:

Data for this item comes from the Timber Stand Management Record System and is summarized with the reforestation history (12/14/93), reforestation index report, and reforestation status (12/17/93) report.

Monitoring Results:

Ninety-two percent of the acres planted in the past 5 years are progressing toward satisfactory stocking (are stocked). Replants are scheduled on acres (8 percent) needing additional stocking. Natural regeneration is certified or progressing on 95 percent of acres harvested since 1976. The remaining five percent are scheduled for additional treatment to insure successful regeneration.

Evaluation of Monitoring Results:

Reforestation success has remained static to slightly improving since Forest Plan monitoring began. Dry summers extending into fall and animal damage have been the primary contributors to seedling mortality.

Item 5:	Site-Specific Examination to Determine Suitability of Land for Timber Management
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	10 years (FY 1997)
Variability Which Would Initiate Further Evaluation:	Significant changes in suitable acres.

Discussion:

Forest lands physically suitable for timber production are lands for which technology is available to ensure timber production without irreversible damage to soils productivity or watershed conditions, and lands for which the possibility of adequate restocking within 5 years is reasonably sure. Cost efficiency is not a factor in the determination of physical suitability.

Nonforest lands, forest lands withdrawn from timber production (wilderness and other classified lands), lands incapable of producing industrial wood, and lands for which there is inadequate response information available to project responses to timber management are identified as unsuitable for timber production.

The Forest Plan identified 1,070,414 acres of forest land as "tentatively suitable" for timber production. The Plan determined that all these lands were technologically suited, no irreversible resource damage would occur, and that restocking could be assured (78,906 acres of generally low site lands had been subtracted because there was inadequate response information to project responses to timber management). This 1,070,414 acres were reduced by 158,745 acres to account for East Meadow Creek (60,851 acres) and other lands not appropriate for timber production over the planning horizon (97,894 acres). This leaves 911,669 acres of suitable forest land.

Since the Forest Plan was implemented in 1987, land suitability classes have been assigned to individual stands. This is done during the compartment exam process and by interdisciplinary analysis for proposed projects. As stands are delineated, examined, or considered for treatment, suitability is assigned and recorded in the timber stand data base.

Evaluation of Monitoring Results:

The 5th Annual Monitoring and Evaluation Report for FY92 stated there is no indication that total tentative suitable forest land acres have changed substantially from Forest Plan assumptions. There have been two general conditions, however, where site-specific analysis indicates that some lands which were classed suitable should not have been allocated to timber production in the Forest Plan.

The first is some lands which could not be regenerated or adequate response information did not exist to predict response to timber management. Although 78,096 acres of such land were identified in the plan, over half were in roadless areas in which no site-specific analysis has been done. Where analysis has been done it is apparent that restocking cannot be assured on some sites and on others the response to timber management is not known. Steep, droughty sites, cold, high elevation sites and wet sites within the grand fir mosaic are examples. If these conditions can be verified and described such lands would be classed unsuitable in the future.

The second is that although certain forest lands may have been physically and biologically capable of producing timber, the costs of timber production and costs to prevent irreversible damage to resources or assure adequate regeneration were higher than the associated timber values for these lands than the plan assumed. These lands would be classed as not cost efficient in meeting the management requirements and multiple-use objectives, therefore unsuitable, in the future plan.

As land suitability has been updated in the timber stand data base it is apparent that differences from forest plan assignments are becoming more significant. The entire suitability process must be redone in the amended or revised forest plan. This process should revise the specific criteria for describing tentatively suitable forest lands. The plan revision will then describe benchmarks and alternatives, the basis for describing which tentatively suitable forest lands are not appropriate for timber production.

The results of monitoring changes in suitability are **scheduled to be fully evaluated during the Forest Plan revision.**

Item 6:	**Maximum Size of Opening for Harvest Units**
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annual
Variability Which 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 silviculture systems which include clearcut, shelterwood, and seed tree. Openings may occur when even-aged systems are initiated. Where timber management is the driving objective, the opening occurs when the regeneration harvest entry is completed as the stocking levels are below the desired future condition. The only exception would be a preparatory cut in a shelterwood system. Even-aged silviculture systems may or may not create openings for other resource objectives depending on the desired outcome of the harvest.

Monitoring Results:

Harvest units exceeding 40 acres in size, and sold during prior years but harvested in 1993, are as follows:

ACRES	METHOD	REASON
42	Clearcut with reserves	Unit size adjusted for logging system and prescribed burning.
38 9	Clearcut Seedtree	Heavy dwarf mistletoe infection
18 12	Shelterwood Shelterwood	These two units are adjacent to each other and a twenty acre non-forest natural opening. Total acres in opening is 50.

Evaluation of Monitoring Results:

All harvest activities greater than 40 acres and those adjacent to other openings are evaluated against National Forest Management Act and Forest Plan requirements. Interdisciplinary review determined that resource objectives are being met.

Item 11:	Validation of Resource Prediction: Timber (Sold Acres in FY 88-93)
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	2 to 5 years (FY 1988 to 1993)
Variability Which Would Initiate Further Evaluation:	If validation efforts show a need for changes to existing resource predictions.

Monitoring Results:

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 silvicultural system
- Total acres by Management Area (MA)

The following four tables display the Forest Plan estimates as well as actual FY 88-93 data taken from sold sales during this period. Sales contained in the actual FY 88-93 sold data include all sales of chargeable (ASQ) volume having an appraisal (Forest Supervisor and District Ranger authority timber sales). Offered sales that did not sell are not included.

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

Silvicultural System	Forest Plan Estimated Volume/ Acre (MBF)	FY88 Vol/Acre (MBF)	FY89 Vol/Acre (MBF)	FY 90 Vol/Acre (MBF)	FY 91 Vol/Acre (MBF)	FY 92 Vol/Acre (MBF)	FY 93 Vol/Acre (MBF)	Weighted Avg.* FY 88-93 (MBF)
Clearcut(Units)	32.5	24.5	24.1	19.7	24.9	15.9	16.8	23.1
Clearcut(Rd ROW)	32.5	29.4	16.4	17.8	19.0	none sold	24.0	21.0
SW Prep Cut[1]	none planned	19.3	none sold	5.3	none sold	none sold	none sold	5.9
SW/ST Seed Cut[2]	18.3	15.5	15.4	15.9	15.6	none sold	11.6	14.8
SW/ST Final Cut[3]	5.0	5.6	8.4	7.3	5.9	none sold	4.7	6.0
Sanitation/ Salvage		none planned						
		8.9	11.1	2.5	4.1	1.8	9.7	5.9
Commercial Thin	5.9	none sold	none sold	2.5	12.2	none sold	none sold	10.7
Selection Cut[4]	12.6	4.6	none sold	12.8	none sold	8.0	11.9	6.9
Weighted Average	22.6	16.3	20.6	15.7	17.3	3.5	10.7	16.1

*Weighted by acres sold

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

Silvicultural System	Forest Plan Scheduled Distrib.%	FY88 Distrib.%	FY89 Distrib.%	FY 90 Distrib.%	FY 91 Distrib.%	FY 92 Distrib.%	FY 93 Distrib.%	Weighted Avg.* FY 88-93 Distrib.%
Clearcut(Units)	36	40	61	51	35	9	10	40
Clearcut(RdROW)	inc above	3	4	5	9	none sold	3	5
SW Prep Cut[1]	none planned	<1	none sold	2	none sold	none sold	none sold	<1
SW/ST Seed Cut[2]	56	24	22	23	37	none sold	46	29
SW/ST Final Cut[3]	3	29	6	10	11	none sold	20	17
Sanitation/ Salvage	none planned	1	1	7	7	84	19	7
Commercial Thin	2	none sold	none sold	1	1	none sold	none sold	<1
Selection Cut[4]	3	3	none sold	1	none sold	7	2	1
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Silvicultural System	Forest Plan Sched-uled Acres/ Year	FY 88 Acres Sold	FY 89 Acres Sold	FY 90 Acres Sold	FY 91 Acres Sold	FY 92 Acres Sold	FY 93 Acres Sold	Average FY88-93 Acres/Year
Clearcut(Units)	1,710	2,607	1,989	2,146	1,923	15	284	1,494
Clearcut(RdROW)	inc.above	239	144	191	503	none sold	87	194
SW Prep Cut[1]	none planned	3	none sold	69	none sold	none sold	none sold	12
SW/ST Seed Cut[2]	2,705	1,549	731	990	2,029	none sold	1384	1,114
SW/ST Final Cut[3]	130	1,921	374	455	602	none sold	608	660
Sanitation/ Salvage	none planned	52	23	317	386	145	574	249
Commercial Thin	100	none sold	none sold	34	67	none sold	none sold	17
Selection Cut[4]	125	189	none sold	31	none sold	12	45	46
Totals	4,770	6,560	3,261	4,233	5,510	172	2,982	3,786

[1] First entry in a 3 or 4 step shelterwood. The goal is to open up the canopy to improve seed production.

[2] Regeneration cut, where the trees left will provide the seed for the next stand of trees.

[3] 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)

[4] This refers to uneven aged management...either group or individual tree selection.

Table 11-d -- Total Acres Sold by Management Area (MA)

CMA Code	Management Emphasis	Forest Plan Scheduled Acres/Year	FY 88 Ac.Sold	FY 89 Ac.Sold	FY 90 Ac.Sold	FY 91 Ac.Sold	FY 92 Ac.Sold	FY 93 Ac.Sold	Average FY88-93 Acres/Year
10	Riparian	180		139	103	176		38	76
12	Timber	2,543	5,083	2,374	3,305	3,501	160	1,792	2,702
13	Aggreg(12/17)	75							
14	Aggreg(12/16/17)	60							
15	Aggreg(12/16)	702							
16	Elk/Deer Winter Range	500	1,245	509	150	1,424		404	622
17	Visual/Scenic	388	71	173	647	409	12		219
18	Aggreg(16/17)	197							
20	Old Growth	none planned	35	22	--	--	--	713	128
21	Moose Winter Range	110	126	44	28	--	--	35	39
23	Municipal Water-sheds	15							
	TOTALS	4,770	6,560	3,261	4,233	5,510	172	2,982	3,786

Management areas (MA) 13, 14, 15, and 18 are aggregates of other management areas. For instance, management area 13 includes intermingled acreages of MA-12 (timber) and MA-17 (visual/scenic); the exact acres of each MA are unknown. During project analysis, these aggregate MAs will be broken into their respective parts based on site-specific data.

Evaluation of Monitoring Results:

From the actual data for sold sales in FY 88-93, the following trends can be identified:

- Actual net cruised volume/acre (all silviculture systems) on sold sales continues to be less (29 percent) than that estimated in the Forest Plan (see Table 11-a). In looking at individual silviculture systems, the largest volume/acre difference between Forest Plan and actual FY88-93 figures continues to be in clearcutting (29 percent less) followed by SW/ST seed cuts (20 percent less). The SW/ST final harvest units yielded 20 percent more net volume than the Forest Plan estimate. Other systems also varied, but the sample size is too small to be significant.

- Actual FY 88-93 data for silvicultural system distribution also varies significantly from the Forest Plan estimates (see Tables 11-b and 11-c). More clearcut and final cut units are being sold, with fewer sold in SW/ST seedcut systems.

- More harvesting is occurring in Management Area 12 (timber emphasis) than was scheduled in the Forest Plan (see Table 11-d).

- The combined FY 88-93 sold acres are 21 percent less than the average annual sold acres estimated in the Forest Plan.

In order to be more consistent with the Forest Plan, future sales should consider less clearcut/final harvest prescriptions and more shelterwood/seed tree regeneration seed cuts. Also, given the falldown in volume per acre in sold sales compared with Forest Plan estimates, the Forest will continue to monitor closely and explore existing inventory data to determine if the FY 88-93 trends can be expected to continue.

Roadless Volume and Acres Sold

The following acres and timber volume sold on the Nez Perce NF were within inventoried roadless areas. During the first 6 years of Forest Plan implementation, the Forest sold less volume in inventoried roadless areas than the decadal Forest Plan projection. It is expected that roadless volume percentage of total volume sold during the second half of the decade will increase.

Roadless Volume and Acres Sold by Fiscal Year

Fiscal Year	Roadless Volume Sold (MMBF)	Roadless Cutting Unit & Road Right-of-Way Acres
1988	6.3	246
1989	1.7	76
1990	7.4	402
1991	31.3	1,568
1992	0.0	0
1993	1.8	15
Total	48.5	2,367

Roadless Volume and Acres as a Percentage of Total Sold

Total Chargeable Volume Sold MMBF (FY88-93)	Actual Roadless Volume Percent-age	Total Sold Acres Included in Cutting Unit Road Right-of-Way, FY 88-93	Actual Roadless Acres Percent-age	Forest Plan Decadal Roadless Sell Estimate (%)
429.9	11	22,718	10	30

Roadless Acres Sold by Roadless Area

Number	Name	District	Sold Acres	Percent of Total Sold Acres
1894	Silver Creek-Pilot Knob	Clearwater	75	3
1921	Gospel Hump (Jersey-Jack)	Red River	833	35
1851	Little Slate Creek	Salmon River	667	28
1235	Dixie Summit - Nut Hill	Red River	402	17
1855	Salmon Face	Salmon River	174	7
1844	Clear Creek	Clearwater	150	7
1852	John Day	Salmon River	66	3
	Total		2,367	100

Volume Per Acre Trends

Monitoring Results:

In 1992, an analysis was made to determine the reasons for the apparent shortfall in volume per acre timber yields from Forest Plan projections. Three factors appear most important:

1. Yield Table Accuracy - Yields were projected by the Prognosis Model using a sample of stands from the 1973 forest inventory. In the past 10 years, the Forest examined many stands to support the prescription and compartment exam program and to build the Timber Stand Management Record System (TSMRS) into the data base for future Forest planning. The following table compares Forest Plan yield table volumes with average volumes from stand exams in TSMRS:

Comparison of Forest Plan and TSMRS Yields (MBF/Acre)

		Timber Productivity Class 3 (120+ cu.ft./ac/yr/)		Timber Productivity Class 4 (85-119 cu.ft./ac./yr.)		Timber Productivity Class 5&6 (20-84 cu.ft./ac./yr.)	
Decade	Age	Plan	TSMRS	Plan	TSMRS	Plan	TSMRS
1985	80	18.3	18.5	19.8	17.1	13.9	14.8
1995	90	21.2	19.7	22.3	18.4	15.1	15.3
2005	100	24.0	21.2	24.7	20.1	16.1	15.6
2015	110	26.8	23.0	27.0	22.1	16.7	16.3
2025	120	29.3	24.2	29.2	22.7	17.2	16.8
2035	130	31.7	26.3	31.0	23.5	17.7	17.6
2045	140	33.6	28.3	32.7	24.5	18.0	18.1
2055	150	35.3	30.2	34.1	26.0	18.8	18.7
2065	160	36.7	32.3	35.3	31.3	18.5	18.5
2075	170	37.7	33.1	36.3	26.1	18.7	20.6
2085	180	38.7	34.7	37.1	27.2	18.9	20.3

For productivity classes (PC) 3 and 4, the lands from which 92 percent of the harvest in the first decade was scheduled, Plan volumes were 3-8 MBF/acre higher (10-25 percent) for all age classes than volumes from recent stand examination. The reasons may be due to collapsing too many timber condition classes into single classes to identify analysis areas, underestimating defect and mortality in Prognosis projections, and the inventory may not have adequately sampled the suitable land base.

2. Availability of Scheduled Acres - The Forest Plan Model, FORPLAN, scheduled outputs from higher volume lands than could be harvested due to constraints not modeled in the Plan. Between 1988 and 1991, the Forest harvested 10 percent more acres in productivity classes (PC) 5&6 lands than the Plan scheduled. Since yields in PCs 5 and 6 are 20-40 percent lower than PCs 3 and 4, one reason experienced yields are less than Plan projections is the Forest has harvested more stands with lower yield outputs than scheduled.

Some factors causing this shift of harvest from MAs and PCs as planned are economics, elk habitat objectives, riparian area management, visual quality objectives, and old growth allocations. For example, 27 percent of the first decade harvest was to come from MA 16 - deer/elk winter range, but only 12 percent of the first 4 years' harvest was from MA 16. Also, although the amount of MA 17 (visual emphasis) has increased (see Section D, Site-Specific Verification of Management Plan Assignments), the amount of harvest in the first 5 years of Plan implementation from MA 17 is less than the Plan modeled. This may be due to the difficulty and expense of accessing typical winter ranges and implementing prescriptions to meet visual quality objectives. The effect in the short run is to concentrate more harvest in a smaller portion

of MA 12 (Timber), which may not cause an immediate yield reduction, but in future years will severely limit options to harvest as modeled.

Second, acres of riparian may have been significantly underestimated. The Forest Plan estimated that approximately 2 percent of suitable lands are riparian, but NEPA analysis indicates 8-12 percent may be. The tendency has been to not harvest or harvest a significantly reduced proportion of these lands than the Plan scheduled.

Third, there has been a tendency to allocate portions of MA 12 as old growth because it is unlikely that some of the Plan old growth allocations (subalpine fir-spruce stands, lodgepole, or regenerated stands) will ever meet the size or decadence criteria to function as old growth as defined in Appendix N of the Plan. The effect of all this is to confine harvest to smaller portions of the drainage and into stands of younger age, smaller diameter, or stands which have been previously harvested.

3. Prescriptions and Yield Proportions - Snag replacement and reserve prescriptions were not represented in FORPLAN yield proportion coefficients. Green trees left for snags could account for 1-2 MBF/acre reduction in yield. Regeneration harvest with reserves, over 1200 acres since 1988, are usually 2-8 MBF/acre lower than yield table projections.

In summary, not only are we harvesting a lower proportion of acres from higher productivity classes (thus higher yield lands) than planned, but existing volumes from 10 years of stand examination are lower than yields projected for the same lands, and prescriptions with lower yields are being implemented which were not modeled. The following table displays the volume per acre for Plan-scheduled regeneration harvest in the first decade with that which would have been projected from the lands actually harvested and yields as estimated from recent stand exams:

Comparison of First Decade Plan and Revised Yields Estimates

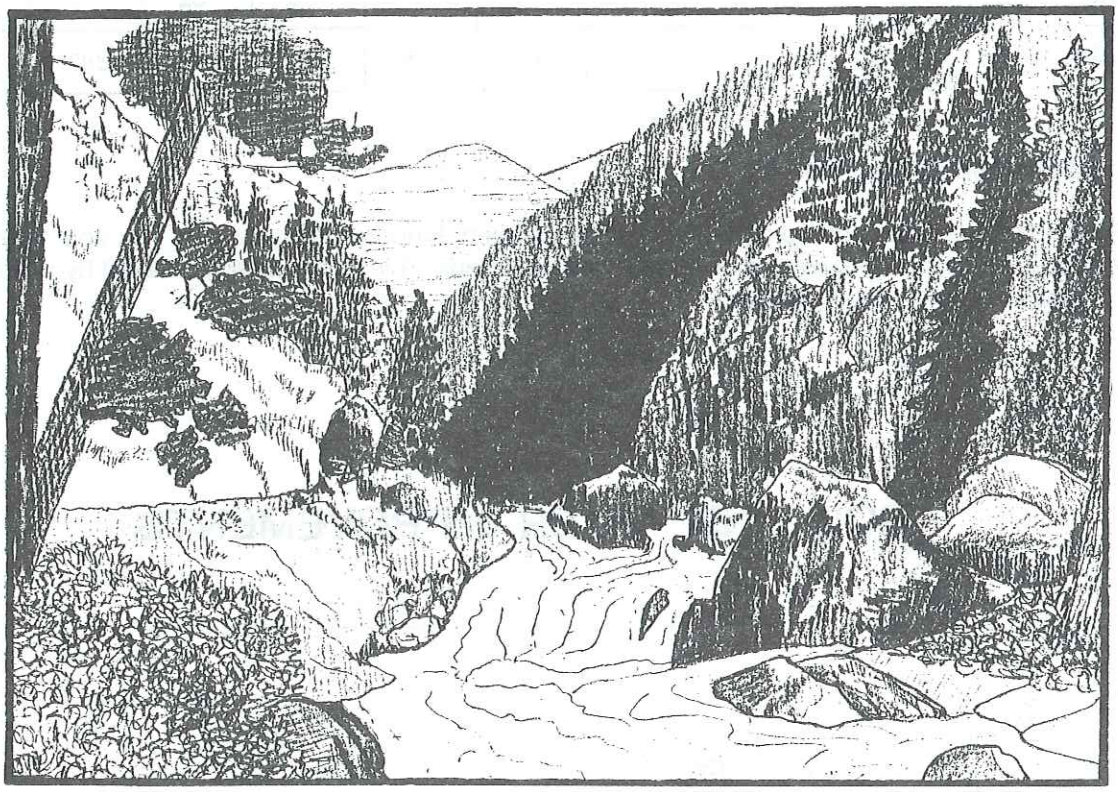
Timber Productivity Class	Treatment Type	Average Age	Proportion of Total Acres Scheduled First Decade (fr FORPLAN VI)	Forest Plan Yield Table Volume/ Acre (MBF)	Proportion of Total Acres Harvested 1988-1991 (fr TSMRS)	Average Volume/ Acre from TSMRS (MBF)
3	CC	134	.24	31.7	.18	26.3
	SW	141	.20	20.2	.14	17.0
4	CC	126	.20	31.0	.28	23.5
	SW	123	.29	17.5	.22	17.6
5/6	CC	127	.00	17.7	.09	17.6
	SW	127	.07	10.6	.09	10.6
Weighted by Harvest Proportion			1.00	23.7	1.00	19.2

Evaluation of Monitoring Results:

These figures, 23.7 vs. 19.2 MBF/acre, compare closely with the 1992 Monitoring Report (page 67) for Sold Net Volume/Acre (22.6 vs. 17.0 MBF/acre). If these TSMRS volumes were further reduced by 1-2 MBF/acre to account for volume in reserve tree and snag replacement prescriptions, the weighted average volume per acre (17.2 MBF) for acres harvested would about equal that (17.0 MBF) for acres sold. These factors alone would indicate a projected timber output 22 percent lower than the Plan allowable sale quantity (80.7 MMBF vs. 103 MMBF of green sawlogs per year for the first decade).

It is unlikely that an 80 MMBF output could be achieved for very many years. As three-fourths or more of acres harvested are confined to MA 12 (as is the trend), it will be difficult to achieve Forest Plan standards and guidelines in these areas. Furthermore, the proportion of intermediate harvest and reserve prescriptions will increase, causing a reduction in volume sold per acre. Also, the amount of MA 12, as evidenced by results of NEPA analysis, is less than predicted by the Plan model (see Section D, "Site-Specific Verification of Management Area Assignments").

SOIL AND WATER



Item 1j:	Soil and Water Rehabilitation and Improvements
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	If the Forest did not achieve its assigned target for the fiscal year.

Monitoring Results:

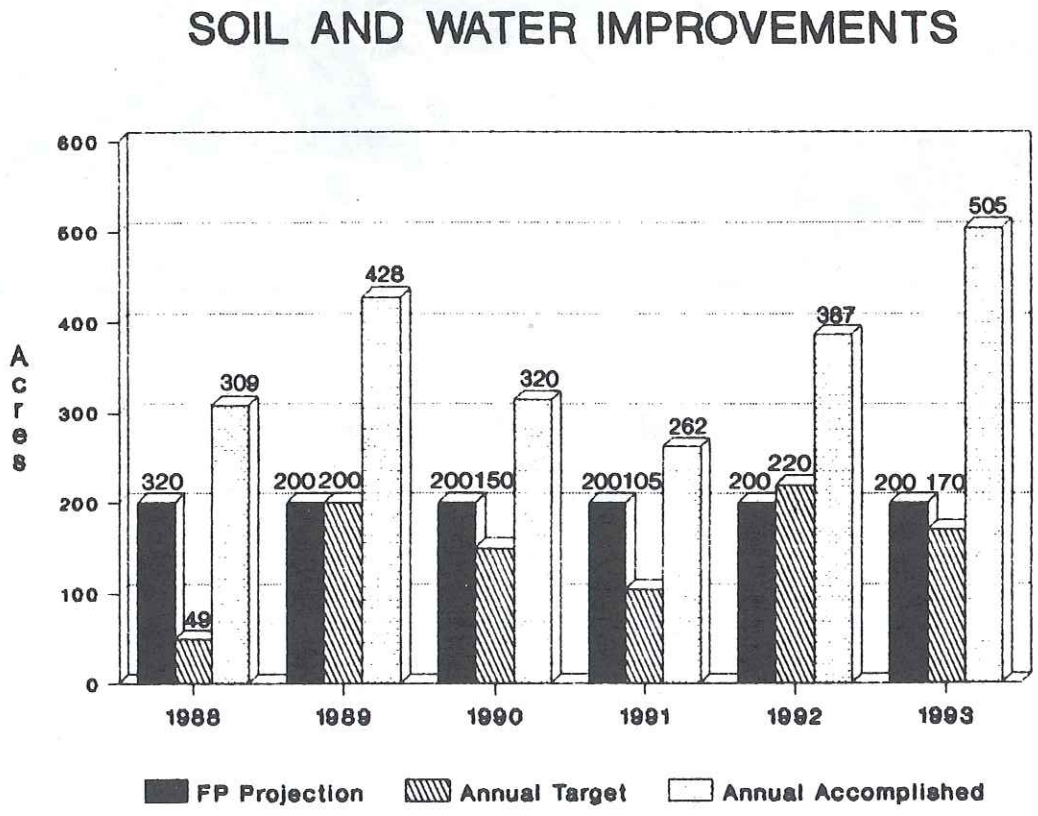
The assigned targets for soil and water improvements using appropriated funds in Fiscal Year 1993 were 170 acres using appropriated funds. The Forest Plan goal is 200 acres per year.

SOIL AND WATER IMPROVEMENTS ACCOMPLISHED IN FISCAL YEARS 1988 - 1993

	Acres Improved					
Funding Source	1988	1989	1990	1991	1992	1993
Appropriated Soil and Water	74	131	159	120	214	244
Knutsen-Vandenburg Act (KV)	52	93	82	85	79	108
Road Maintenance	113	57	76	25	82	90
Other Funding Sources	70	147	3	32	12	63
TOTAL	309	428	320	262	387	505

Evaluation of Monitoring Results:

In FY93, the Forest received some additional improvement funds at mid-year and was able to exceed the Forest Plan goals for improvement using appropriated funds. This was further exceeded by accomplishing work through other funding sources.



Item 2g:	Impacts of Management Activities on Soils
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annually
Variability Which 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.

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.

Monitoring Results:

Implementation Monitoring: Implementation monitoring was conducted during the course of Forestwide and district field reviews. Field reviews were used to develop better recognition of soil and site characteristics that affect productivity, slope stability and tentative suitability.

Most environmental analyses completed in 1993 used soil information to describe soil limitations and opportunities within assessment areas. This information was usually used to assist in project design and development of specific mitigation measures. Analysis of soil limitations and subsequent project design need increased emphasis through appropriate training or staffing.

Soil and riparian inventories were used to help identify areas of wet soils susceptible to displacement and puddling, and specific mitigation measures were prescribed for these areas.

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

Implementation monitoring identified the following issues that affect soil productivity:

>Heightened emphasis on obliterating existing roads and planning new roads for obliteration is warranted and underway.

>Continued emphasis on incorporating district watershed and soil productivity concerns into road construction and reconstruction planning and implementation is warranted.

>Local geology or climatic events in the early seasons following road construction or reconstruction can dramatically influence how well road cuts and fills stabilize. Increased emphasis on evaluating stabilization measures and remedial treatments is warranted.

Effectiveness Monitoring: Qualitative effectiveness monitoring was conducted on selected timber sale units and mine sites. Results indicate :

>Machine excavated firelines installed to prevent post-harvest fire from impacting adjacent riparian areas may create areas of raw exposed substrate that are a potential source of sediment into a stream, and locally reduce soil productivity. Narrower hand or machine lines are often likely to be fully effective in this slope position, and less damaging to soil and water resources. In many cases, the riparian area is moist enough to serve as the fireline. On cable sites, slash may be pulled away from streams to form a fuel break.

>Some recent harvest units reflect excellent integrated planning and administration: adequate leave trees of species and size class for seed and snag retention, minimal road construction and ground disturbance, sensitive use of fire, good attention to site in riparian boundary delineation and use of fire near riparian areas, attention to public expectations of landscape character and historic stand composition and dynamics in leave tree marking, boundary shape and character. Other treatments showed traditional focus on optimizing growth and yield in the next generation, with little attention to public aversion to clearcutting, maintenance of local genetic material, and historic stand structure.

>Excavated skid trails are typically waterbarred and grass seeded after harvest. The exposed, compacted substrate is prone to rilling and low in nutrients and organic matter compared to unexcavated areas. Pulling in slash with an excavator adds organic matter, nutrients and microbial material, increases surface roughness, reducing erosion, and hastens recovery of soil productivity. In addition, less seeding of non-native grasses may be required, reducing invasion by aggressive species and subsequent livestock traffic.

>Traditional road side grass seeding is not effective on certain geologic materials (well weathered granitics). Trials with native species, additional soil amendments, and other life forms (shrubs, trees, mosses) are planned.

Qualitative monitoring on one timber sale indicated that large organic debris may have been insufficiently provided for in harvest and site preparation prescriptions. Provision for large organic debris for maintenance of site productivity was not addressed in Forest Plan standards. Although generally prescribed for in recent sales, there is a need to review these prescriptions and assure that harvest and site preparation methods are compatible with them, and that most recent research is being applied. Sampling of natural disturbance regimes carried out in 1993 and planned for 1994 should help add to our understanding of amounts and distribution of large organic debris.

Debris torrents that occurred in 1993 from wildfires in 1992 (see Water Quality Section 2l), combined with fire regime studies (Barrett 1993 and 1985) suggest that greater severity and scale of watershed response to fire might be anticipated as a result of greater fuel accumulations than certain areas experienced historically where frequent low severity fires were typical. More severe fires will also affect soil productivity through increased erosion, consumption of organic matter, loss of nutrients, and changed vegetation dynamics.

Validation Monitoring: Two validation monitoring projects were initiated on the Forest in 1993.

A region wide sampling program designed to describe soil, vegetation, and terrain by broadscale sampling units for correlation with spectral imagery included sampling on the Nez Perce, Clearwater and Idaho Panhandle National Forests. Sampling in 1993 focused on existing plant community composition and structure in managed and natural landscapes. Sampling described vegetation, soils, insect and disease conditions, and fire history on sample sites. Sampling in 1994 will be in selected polygons defined for an existing vegetation classification and mapping project that includes Idaho and Montana. This will be a common existing vegetation theme across agency and ownership boundaries, with a resolution of 5 acres.

A fire regime study evaluated historic and recent fire frequency and severity for the breaklands along the lower South Fork of the Clearwater River. Frequent low severity fires on south aspects have maintained open stands of uneven aged ponderosa pine to 350 years old up to 1900. Today these are stocked with 200 trees per acre

and are likely to burn more intensely and have more severe soil effects. On north aspects ponderosa pine stands usually showed 2 or 3 seral age classes regenerated after mixed severity burns, and stand dominants were seldom older than 200 years. Understory development has been vigorous, and bark beetle-killed Douglas-fir have added to fuel accumulations. Increased fuel loads and continuity of fuel indicate that future fires may be more lethal and damaging to the soil and water resource.

Evaluation of Monitoring Results:

Improved use of soil information in project analysis and design, and better understanding and mitigation of soil impacts associated with road construction, logging and site preparation were two needs identified in the Forest Monitoring Report of 1989, and continue to merit increased emphasis. Use of soil information in restoration assessment and design will be equally important.

Improved coordination and greater attention to site specific terrain and vegetation has resulted in roads better fitted to the landscape, with less disturbed area and less erosion. Making revegetation measures and followup treatments equally site specific would add to their effectiveness. Restoration projects funded through ecosystem management in 1993 emphasized treatment of some of these needs. These treatments included the planting of lodgepole pine and alders along the Blue Ridge Road, plantings of native species along the Whitewater Road, and hydroseeding along Roads 1810 and 468.

Use of soil information in integrated resource analysis and project design has improved on most districts, but work remains to be done. Key soil issues need to be recognized, described, and acknowledged in project design and implementation. Training and/or continuing education are recommended as part of landscape assessment training.

Small salvage sales are being considered where negligible watershed and fisheries effects can be demonstrated. These emphasize salvage and sanitation, use of existing roads and landings, minimal ground disturbance, and riparian protection. They appear to maintain options, but to the degree that they defer landscape level assessment that could drive more comprehensive restoration initiatives, they are the tail-out of the traditional forest management paradigm and impede the systematic development of a new paradigm.

Restoration, considering both biological and physical conditions and function, is key to maintenance of long term soil productivity, water quality, and maintenance of viable populations of native species. Integrated landscape and site specific assessment and timely accomplishment need increased emphasis in forest and district priorities. They offer the opportunity to form collaborative partnerships with other entities and publics, demonstrate ecosystem management in practice, and contribute to local economies.

Item 2h:	**Impacts of Management Activities on Water Quality**
Frequency of Measurement:	Annually
Reporting Period:	October 1, 1992 to September 30, 1993
Variability Which 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 time frames.

Description and Results:

Effectiveness and Validation Monitoring: The Forest collected streamflow 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, bedload sediment, water temperature, and conductivity. Additional water quality sampling was conducted on several streams in the Cove-Mallard area by the Red River Ranger District.

The Forest's Soil, Air and Water Program also maintained seven precipitation storage gages, five precipitation recording gages, five hygrothermographs and two snow courses. Additional weather monitoring is conducted by fire personnel.

The Forest normally issues an annual technical report entitled "Hydrologic Data Summary and Monitoring Analysis". This report summarizes streamflow and climatic data collected on the Forest during the previous water year. It also provides a more detailed analysis of water quality and related monitoring results than the annual Forest Plan monitoring report. Due to personnel limitations, no report was issued during FY93. The reports for Water Years 1992 and 1993 will both be issued in FY94.

Evaluation of Monitoring Results:

Analysis of sediment yield data from the gauged water quality monitoring stations is ongoing. Due to personnel limitations, no substantial data analyses were completed nor were any special monitoring reports issued in FY93.

Item 2i:	Water Quality: Project Level Administrative Reviews and Field Studies
Frequency of Measurement:	Annually
Reporting Period:	October 1, 1992 - September 30, 1993
Variability Which Would Initiate Further Evaluation:	If the reviews or studies discover violations of Forest Plan standards or Idaho Water Quality Standards.

Discussion:

Implementation Monitoring: Forest Plan implementation monitoring of road construction and reconstruction, timber harvest, mining and range activities were conducted in 1993. The monitoring focused on the implementation of Forest Plan and NEPA document direction relative to management of the water, soils, and riparian resources. The reviews were done by interdisciplinary teams composed of Nez Perce National Forest, Idaho Division of Environmental Quality, Industry, and Idaho Department of Lands personnel. Other agencies, the Nez Perce Tribe, and parties were invited to participate in these reviews and chose not to. Checklists were used to record the team's findings. Checklist findings were agreed upon by the monitoring team at the conclusion of the monitoring review.

The following activities were reviewed:

- Baboon Gulch Timber Sale, Salmon River Ranger District (8/31/93)
- Blue Ribbon Mtn. Timber Sale, Elk City Ranger District (9/1/93)
- Shooting Star Timber Sale, Elk City Ranger District (9/1/93)
- Dollar Days Placer Mine, Salmon River Ranger District (8/31/93)
- Hungry Ridge Range Allotment, Clearwater Ranger District (9/2/93)
- White Bird Range Allotment, Clearwater Ranger District (9/2/93)

Monitoring Results:

The monitoring teams made 53 riparian/water monitoring evaluations on the three timber sales (4 harvest units). Findings were that the projects met 50 (94%) of the standards. The teams made 12 soil monitoring evaluations on these same timber sales. Findings were that the projects met all 12 of the standards.

Where site-specific best management practices for timber management were applied in a Stream Segment of Concern there was full compliance with the Idaho Forest Practices Act Rules. In other areas, only two minor departures from the Act's rules and regulations were identified.

The review team made 10 riparian/water monitoring evaluations on the small placer mine project. They found that the project met 6 (60%) of the standards. No soil monitoring evaluations were made.

Another monitoring team made 22 riparian/water monitoring evaluations on the two range allotments. Findings were that the projects met 21 (95%) of the standards. The team made 4 soil monitoring evaluation on these projects and found that all 4 standards were met. In addition 9 evaluations were made on how the Forest met other standards that affect the riparian, water, and soil resources. All of these standards were met.

Site-specific results of these reviews are available at the Nez Perce National Forest Headquarters.

Evaluation of Monitoring Results:

The reviews suggest that compliance of timber harvest activities with Forest Plan standards and Idaho Forest Practices Act Rules have improved over previous years. This is particularly true with respect to riparian management prescriptions and implementation. Due to the heightened emphasis on fish habitat maintenance and restoration, standards and practices are expected change significantly in the near future to afford greater protection.

The relatively low compliance rate of the placer mine operation suggests that additional work is needed to improve the quality of such operations in some cases. The lack of specific mandatory best management practices is a limitation in achieving this.

The reviews showed that range management has improved significantly over previous years. This is largely due to implementation of a more rigorous system of measurable standards and period monitoring through the grazing season to determine compliance with those standards.

SPECIAL STUDY: NOBLE TIMBER SALE ROADS (9505 System)
by Sue Mahoney, Brooks Beegle and Dave Gloss
Red River Ranger District

Implementation and effectiveness monitoring was conducted on Road #9505 and spurs (A,B,C,E) by engineering and hydrology personnel during 1993. This road system was constructed as part of the Noble Timber Sale. Construction was completed in 1993. The majority of the road system is within the Little Mallard Creek watershed.

Implementation Monitoring:

Implementation reviews focused on the use of sediment mitigation measures. The purpose of implementation monitoring is to determine if activities were implemented as outlined in the Cove Final Environmental Impact Statement (FEIS).

The following measures were fully implemented on Road #9505 and spurs (A,B,C,E): rock surfacing, slash filter windrows, and seeding of cut and fill slopes. Ditch rock, rock stabilization walls, and sediment traps were implemented on portions of these roads.

During construction of the E spur, it was determined that the road surface consisted of unconsolidated material on road gradients up to 6.5 percent which may have caused unacceptable erosion. The contract originally specified a native surface road with driveable dips, but after review of site conditions, it was decided to implement an additional mitigation measure to reduce the erosion impacts. The contract was changed and aggregate surfacing was placed on the road.

The FEIS describes the use of mitigation measures in general terms, and the measures implemented on Road #9505 and spurs (A,B,C,E) meet or exceed those standards. The FEIS assumes 80 percent and 70 percent mitigation measures for collector and local roads, respectively. It was estimated that the entire 9505 road system was implemented to meet an 80 percent mitigation standard.

Effectiveness Monitoring:

Effectiveness monitoring was used to evaluate whether implemented mitigation measures and best management practices (BMP's) were effective in meeting their objective (generally to prevent or reduce sediment). Since road construction was completed the same season as the review, the full evaluation of practices was not possible. However, certain practices could be, and were, evaluated soon after implementation to determine effectiveness.

Where implemented, the rock surfacing, rock retaining walls, and sediment traps are very effective in reducing sediment input to streams. In addition, the ditch rock and slash filter windrows were at times very effective, however there are some suggestions that would further increase there effectiveness. It is too early to assess effectiveness of cut and fillslope seeding.

While many of the mitigation measures were quite effective, the following suggestions are presented to improve effectiveness of a few specific measures:

Placement of ditch rock needs to be high enough on the cutslope to prevent eroding the toe of the cutslope.

In some cases the windrows cover live stream crossings, partially blocking their flow and potentially creating a new channel, or blocking fish passage. Ideally, windrows should tie into culverts at live stream crossings, without entering the stream channel. This would prevent the windrow from affecting the stream channel morphology and reduce the risk of creating a fish passage barrier, while minimizing sediment delivery to streams from the road surface and fillslope.

Along most of the road, the windrows were of sufficient size to trap the available sediment. However, at some cross drains, windrows have been constructed smaller to prevent trapping enough sediment to fill and block the cross drain. At many of these points there is sediment escaping through the windrows. Recent contract requirements provide for additional clearing below cross drain pipes to build an adequate windrow without impairing pipe function. To improve effectiveness on flatter topography where vertical reflect is limited, it is recommended that additional straw bales be placed below the windrow.

Monitoring also revealed a fillslope failure which occurred during the spring of 1993 on a portion of the 9505 road, which was partially constructed in 1992. The fillslope failure occurred at an unnamed tributary to Little Mallard Creek. The slump was estimated to be approximately 15 cubic yards, but only a small portion of this actually reached the stream. The cause of the failure was related to subsurface groundwater flow in the area. At the time of road location recommendations to construct a special base treatment via rock blanket were made just ahead of the area of failure. This recommendation was based on the presence and extent of the available site indicators. The design and contract subsequently incorporated these measures in accord with the areas identified in the field review. At the time of initial construction the site that eventually failed evidenced no presence of ground water flow. Review of the site after the failure showed groundwater flow in the area of failure. The occurrence of a high precipitation year following a series of dry years prior to construction may have changed ground water conditions. Soon after the failure was discovered, temporary stabilization and mitigation measures were implemented to minimize further surface erosion from entering the stream course. Additionally a french drain was installed in the ditchline and the rock blanket was extended through the area of failure to drain the groundwater and reduce the risk of future drainage problems.

SPECIAL STUDY: Porcupine Fire Monitoring
By Dave Gloss
Red River Ranger District

Post-fire monitoring of the Porcupine Fire Complex was conducted in 1993. This fire occurred in the summer of 1992 and mostly burned within the Crooked Creek watershed. The objective of this monitoring was to

examine fire-related sediment impacts. Visual observations were made along Trail #215 and a 1989 substrate measurement near the mouth of Crooked Creek was repeated.

The Porcupine Fire has increased the amount of sediment available and delivered to Crooked Creek. Observations of fire effects conducted in September, 1993, revealed two debris torrents and visible increases in deposited sediment in portions of Crooked Creek. Surface erosion, channel scour and small (5-10 cubic yards) mass movements, as a result of, or related to the Porcupine Fire, were observed to contribute fine sediment to Crooked Creek.

The two debris torrents occurred approximately 4 miles up from the mouth, one upstream and one just downstream of Fitz Creek. Slopes on the east side of Crooked Creek, where the debris torrents occurred, are very steep (60-100 percent). High percentages of these wilderness drainages burned fairly intensely. Both channels scoured and deposited alluvial fans into Crooked Creek. Obvious signs of deposited material are evident in Crooked Creek for 0.25 to 0.5 mile downstream from the debris torrents. The events are estimated to have occurred sometime in June, 1993 and may be related to increased runoff from the heavily burned watersheds and/or heavy rains.

Visual observations indicate higher than baseline deposited fine sediment in portions of Crooked Creek, both above and below fire effects, and above and below the wilderness boundary. While deposited fine sediment is apparent in portions of Crooked Creek, other reaches are relatively free of fine sediment. Wolman pebble counts of two riffle and two pocket-water cross-sections were taken approximately 1 mile from the confluence with the Salmon River, in 1989 and repeated in 1993. This information shows no difference ($P = 0.086$) in fine sediment proportions from pre-fire (1989) to post-fire (1993) in this lower reach of Crooked Creek. All four cross-sections were combined into one sample.

Areas of lower gradient and areas influenced by the debris torrents show the most obvious signs of fine sediment deposition, while many higher gradient areas do not show signs of fine sediment deposition. Increases in fine sediment are hypothesized to be from a combination of the highest flows seen in recent years (slightly above average flows), development in the upper watershed and fire effects. Temporary and localized deposits of fine sediment may influence instream conditions, but the channel is expected to return to pre-fire conditions in a short time due to the high energy of lower Crooked Creek.

Item 2j:	Impacts of Management Activities on Riparian Areas
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	Activity areas found in significant violation of Forest Plan standards.

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
1) if riparian areas are delineated and evaluated during project design,
2) if preferential consideration is given to riparian-area-dependent resources in cases of unresolvable conflict,
3) if appropriate provisions of the Idaho Forest Practices Act (BMPs) are applied, or a variance sought, and
4) if effects on wetlands and floodplains are considered in project development.

Forest-wide riparian implementation monitoring was conducted on 3 timber sales, 2 range allotments and one mine site. Additional monitoring was carried out in district field reviews, project design, and implementation.

Implementation monitoring continued on proposed activities with the potential to affect Snake River chinook salmon habitat.

Effectiveness Monitoring determines
1) 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
2) if cover and security for riparian-dependent species have been maintained.

Qualitative effectiveness monitoring was conducted on field reviews of timber sales in 3 watersheds, that included road construction and timber projects with potential to impact riparian systems.

Effectiveness monitoring was carried out as part of the review of proposed Forest activities that have the potential to affect anadromous fisheries habitat.

Effectiveness monitoring was carried out in field reviews of two range allotments and one mine site.

Validation Monitoring is used to describe riparian dependent resources, their values, and predict effects of management (Forest Plan II-12). The riparian classification project initiated in 1989 continued in 1993, with emphasis on sampling in meadow systems and in the Stillman analysis area on the Selway district. Cobble embeddedness data for fisheries surveys in undeveloped watersheds were evaluated by geology, valley bottom type and landform setting.

Monitoring Results:

Implementation Monitoring: Riparian areas are now 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 are calculated from these delineations during the management area validation process. Additional riparian areas are usually identified during sale layout. Monitoring indicated that sale layout occurring in the winter or during very dry seasons may miss some riparian areas because they are hidden by snow or channels are dry.

Compliance with current provisions of the Idaho Forest Practices Act and Forest Plan standards as they address riparian management has improved significantly in recent years. See the discussion under Item 2I - Water Quality.

Effectiveness Monitoring: Current Forest policy (1991) states that "Project-level NEPA documents must therefore demonstrate through analysis that riparian-dependent resources will be protected or enhanced". This requires "adequate site-specific data, analysis, and documentation".

Monitoring in 1993 suggests that deferral by excluding forest management activities, whether prescribed fire or harvest, is preferred and effective in the short term. With some modifications, this approach is also expected to meet PACFISH standards that are expected to be signed into law in 1994. District sale administrators, fisheries biologists and hydrologists have examined and modified harvest unit boundaries to better protect riparian dependent resources in sales that have not yet been harvested.

Ability to describe riparian dependent resources and analyse riparian processes within a watershed context, is a basic requirement to implement current riparian management direction over the long term. This means describing existing condition, how it fits within the range of natural variability for that stream type and watershed setting, and the site specific management to provide for riparian function as well as beneficial uses. Both reach and reach sequence within the watershed are thought to influence riparian physical and biological attributes. Concerns for maintenance of aquatic habitats, water quality, and riparian vegetation dynamics reinforces the need for integrated characterization of historic and current riparian condition and key processes.

Range allotment monitoring using more rigorous utilization criteria, vegetation and streamside condition, and more frequent assessment is resulting in improved vegetation and streambank condition.

Monitoring of the placer mine site indicated that planning for riparian protection before mining, and preparing for restoration after mining, need more emphasis. Delineation of jurisdictional wetlands for implementation of Section 404 of the Clean Water Act (permitting discharge of dredge or fill material into wetlands) uses 1987 Corps of Engineers Manual criteria, but no one on the Forest is trained to do so. Evaluation of wetland values and function is also part of the analysis for permitting. Administration during mining activities is limited by funds and staffing. Restoration after completion is limited by these and the lack of expertise working in the site specific conditions left by mining in riparian areas.

Validation Monitoring: The riparian classification project continued in 1993 at reduced funding levels. The objectives were to describe the stream systems, soils and vegetation of these areas, their equilibrium state, and response to disturbance. Coordination with fisheries survey objectives and methods requires continued emphasis. Preliminary examination of cobble embeddedness data by valley bottom type, geology, and landform setting showed high levels of variability, with greatest differences between volcanic and other geologic groups; and large, high energy streams compared to smaller, low gradient streams. Mapping of landtype associations for sediment hazard is being done in 1994 as part of a region wide effort. More quantitative analysis of pebble count and cobble embeddedness data will be done in 1994 to test mapping criteria and describe natural variability in substrate attributes.

Analysis of riparian classification data in 1994 will address riparian timber stand structure, and relationship to disturbance history, at both reach and watershed scales. This will help characterize natural variability in fire disturbances that affect reaches through on site and upstream effects.

Evaluation of Monitoring Results:

Delineation of riparian areas using basic attributes of stream channel, flows, and vegetation is being done consistently and will provide good information on the extent of this environment on the Forest. This information needs to be compiled by project area, or selected watersheds across the Forest. About 3/4 of the Forest wetland inventory maps have been prepared for spatial analysis. When completed, extent of riparian management areas can be more easily computed, based on slope and/or distance criteria.

Although wetlands are being well delineated, evaluation has proven more difficult, hence most activities are deferred. Their dependent resources, functions, and the management necessary for their maintenance, are poorly understood. To prepare for Forest Plan revision and development of an aquatic ecosystem conservation strategy, synthesis of available research, development of an aquatic classification system, and characterization of aquatic community structure and distribution are needed. The riparian classification system and landtype association mapping would contribute to this work.

Provisions of the Idaho Forest Practices Act rules regarding timber harvest are now well understood and usually consistently applied. Training for Forest personnel new to Idaho will be a continuing need.

Mining operations in riparian areas probably need a consistent approach to 1) describing the premining attributes of soil, water, vegetation, and site that contribute to an individual wetland or streamside zone 2) describing the proposed activity and how different components will be affected 3) developing a restoration strategy designed to move the system back toward predisturbance function. This could include layering or stabilizing soil materials, water table manipulation, planting, seeding and adding soil amendments, and protection from disturbance such as livestock grazing.

A training session in jurisdicitional wetland delineation is offered in 1994 and a Forest hyrdologist will attend.

The minimal best management practices required for Class II streams by the Idaho Forest Practices Act rules are recognized as a particular area of concern where improved inventory and interdisciplinary analysis are needed.

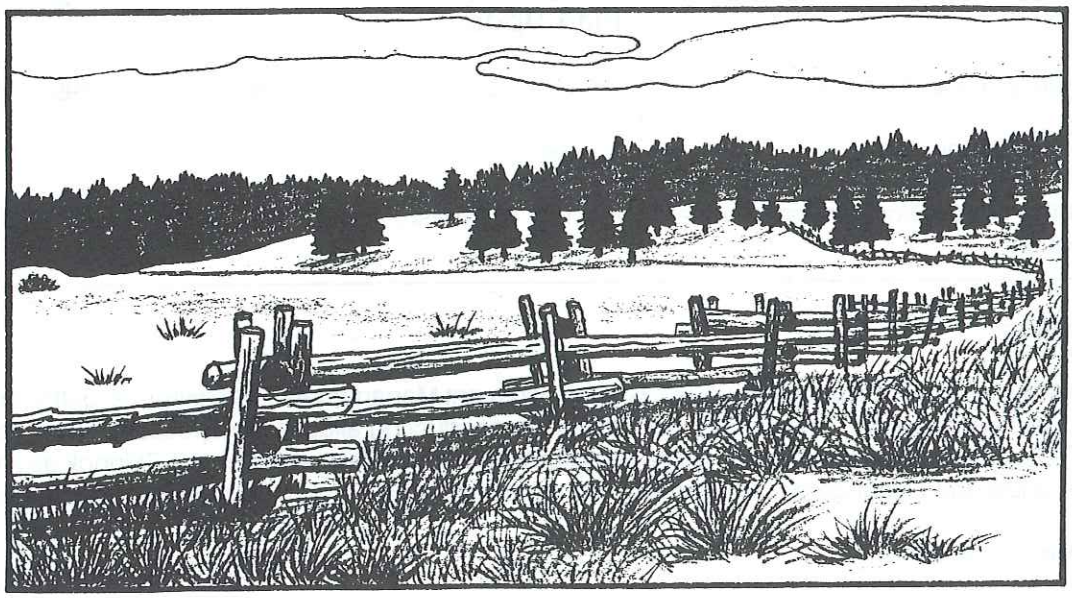
Stream surveys to describe watershed and fisheries condition are being used more extensively to describe riparian condition. More interdisciplinary analysis using watershed and landscape level information is required to describe watershed history, riparian function, and the appropriate role of management. Ecosystem management funds were allocated in 1993 to develop an integrated riparian vegetation inventory system. The Clearwater district will continue to work on this in 1994.

Item 11:	Validation of Resource Prediction Models: Water Quality and Fish:
Frequency of Measurement:	Annually
Reporting Period:	2 to 5 years (FY 1989 to 1993)
Variability Which Would Initiate Further Evaluation:	If validation efforts show a need for changes to existing predictive models.

Sediment Yield Model Tests:

A preliminary sediment yield analysis comparing measured and modeled annual sediment yields was completed in 1991. Further validation utilizing the remaining Forest data is ongoing by Dave Gloss through a University of Idaho master's thesis project. This project is scheduled for completion in December, 1994. Results of this study will be used to evaluate the accuracy of the sediment prediction model and to make appropriate adjustments in the Forest's use of the model and the monitoring program associated with its validation.

RANGE



Item 1g:	Animal Unit Months Grazing Permits
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	+/- 10% of Forest Plan Estimate

Monitoring Results:

The Forest permitted 31,700 animal unit months (AUMs) for 1993. The Forest authorized through the yearly billing process 27,400 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% less than the current permitted levels.

Evaluation of Monitoring Results:

The Forest is proposing to eliminate this monitoring item and record the number of permitted AUMs in Table 1, page 4 of this Report, comparing outputs and activities in the Annual Monitoring and Evaluation Report with those projected in the Forest Plan.

Item 1I:	**Range Analysis and Allotment Management Plan Updates**
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	+/- 10% of Forest Plan Estimate

Discussion:

This year the program included continued work on Allotment Management Plan revisions, gathering resource data for planned revisions, monitoring riparian zones, conducting allotment inspections, providing information for integrated resource analysis, gathering information to address the listing of Chinook as a threatened species under the Endangered Species Act and consulting with National Marine Fisheries Service.

Monitoring Results:

Analysis began on three allotments scheduled for AMP revisions in 1993. However, the analyzes were not completed and work will continue in FY 1994. Twenty-three active allotments are in need of revision to ensure vegetation management is occurring in compliance with the Forest Plan. Forest Plan standards have been incorporated into Part 3 of all Term Grazing Permits. Forest Plan standards will be administered through the permits until AMPs can be revised.

National direction emphasizes that all Forests are to prioritize allotments based on resource conditions. The following Nez Perce Allotment Update Priority Schedule is the most recent version of the Forest schedule. It displays the Forest Plan status, the year each allotment is scheduled for updating, and the key resource values that may affect management of each allotment. In addition, the Forest has implemented a tracking system to monitor progress in revising management plans.

Evaluation of Monitoring Results:

The Forest intends to bring all allotments into compliance with Forest Plan standards and guidelines based on the priorities outlined in this schedule. The information contained in the schedule reflects the best information available at this time and is based on current funding levels. The schedule will be updated annually to reflect changes in resource information, Forest management priorities and funding. At the current funding level and forest priority, all allotments that need revising will be updated by FY 99. During the past year work priorities focused on the Endangered Species Act and consultation under Section 7, monitoring and permit administration. Due to these priorities progress on Allotment Management Plan revisions slowed and completion of the scheduled analyzes was delaid into the next year. Annual Operating Instructions were developed with additional management requirements and monitoring to reflect the needs of riparian dependent species and the threatened spring/summer and fall chinook.

Fifteen grazing allotments are currently vacant. Term Grazing Permits have not been reissued on these allotments. The Grants Process and a new AMP will be completed prior to reallocation of grazing on vacant allotments. Due to the current funding level vacant allotments are low priority for revised AMP's, and will follow completion of active allotments.

Inspection and monitoring of many allotments indicated that Annual Operating Instructions were followed. Due to a more proactive role by permittees, increased monitoring and administration and tighter grazing standards, on-the- ground management improved in 1993. Most problem areas identified through monitoring and administration were small in size, and are easily corrected. Conditions requiring removal of livestock were documented in 5 occasions. Each time this occurred the permittees were notified and the livestock were promptly removed from the problem area. The information collected during 1993 will be used to tailor site specific management strategies for 1994.

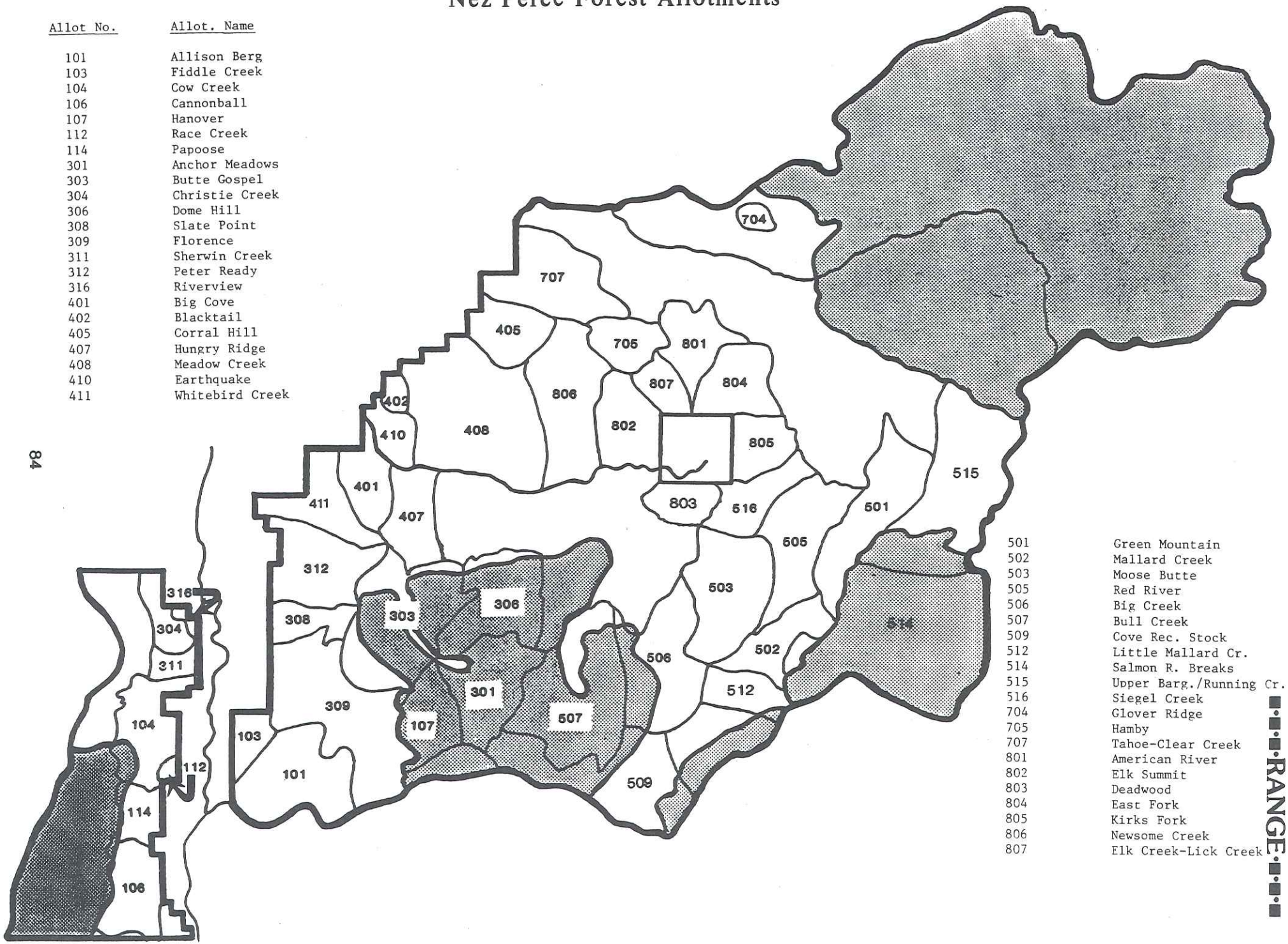
Allotment Management Plan (AMP) Update Schedule

Allotment Name[1]	Allotment Plan Status	Schedule	Key Resource Values
Race Creek	Revision Complete	Complete	Riparian
Blacktail	Revision Complete	Complete	Big Game
Glover Ridge	Revision Complete	Complete	Big Game
Christie Creek	Being Revised	1994	Riparian
Hungry Ridge	Being Revised	1994	Riparian/Wildlife
Sherwin Creek	Being Revised	1994	Timber/Riparian
Peter Ready	Needs Revision	1995	Timber/Veg.Succession
Riverview	Needs Revision	1995	Riparian
American River	Needs Revision	1995	Riparian
Hanover	Needs Revision	1995	Wilderness/Riparian
Butte Gospel	Needs Revision	1995	Wilderness/Riparian
Whitebird Creek	Needs Revision	1995	Vegetative Succession
Elk Cr.-Lick Cr.	Needs Revision	1996	Riparian
Allison-Berg	Needs Revision	1996	Timber Management
Mallard Creek	Needs Revision	1996	Riparian
Cow Creek	Needs Revision	1996	Wilderness/Timber Mgmt.
Meadow Creek	Needs Revision	1997	Big Game
Cannonball	Needs Revision	1997	Wilderness/Recreation
Corral Hill	Needs Revision	1997	Vegetative Succession
East Fork	Needs Revision	1997	Riparian
Papoose	Needs Revision	1998	Riparian
Newsome Creek	Needs Revision	1998	Timber Management
Green Mountain	Needs Revision	1998	Riparian/Big Game/T&E
Fiddle Creek	Needs Revision	1998	Timber Management
Tahoe-Clear Creek	Needs Revision	1998	Riparian/Timber Mgmt.
Earthquake	Needs Revision	1999	Riparian/Big Game
Elk Summit	Needs Revision	1999	Timber Management
Hamby	Needs Revision	1999	Timber Management
Kirks Fork	Needs Revision	1999	Riparian
Florence	Vacant		
Moose Butte	Vacant		
Deadwood	Vacant		
Big Cove	Vacant		
Big Creek	Vacant		
Anchor Meadows	Vacant		
Bull Creek	Vacant		
Dome Hill	Vacant		
Red River	Vacant		
Siegel Creek	Vacant		
Slate Point	Vacant		
Cove Rec. Stock	Vacant		
Little Mallard Cr.	Vacant		
Salmon R. Breaks	Vacant		
Bargamin/Running	Vacant		

[1]See Nez Perce Forest allotment map on following page.
Vacant allotments are allotments with no Term Permit holder.

Nez Perce Forest Allotments

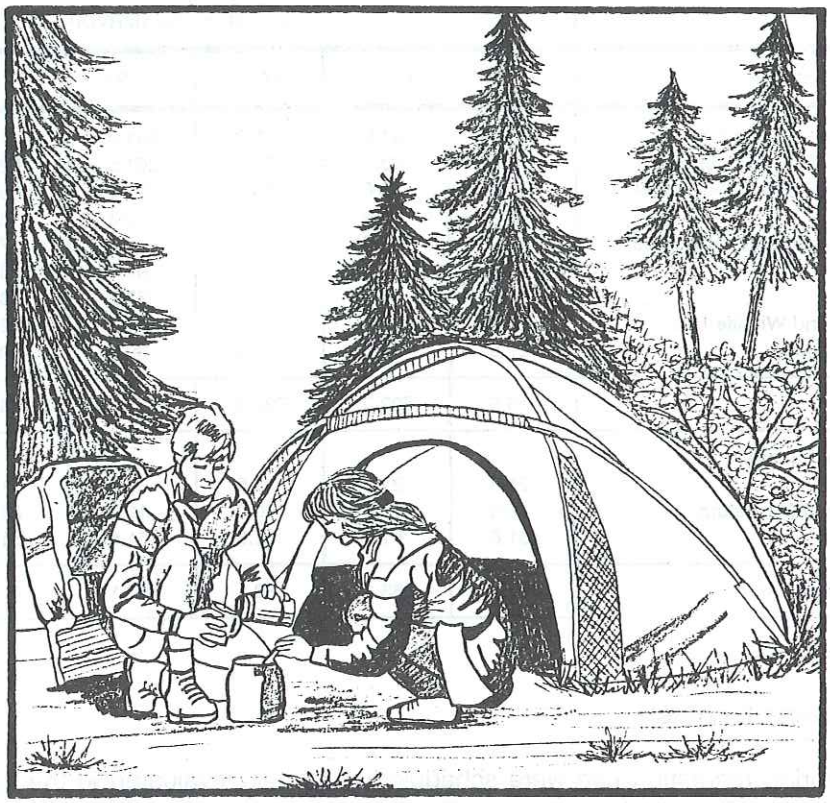
Allot No.	Allot. Name
101	Allison Berg
103	Fiddle Creek
104	Cow Creek
106	Cannonball
107	Hanover
112	Race Creek
114	Papoose
301	Anchor Meadows
303	Butte Gospel
304	Christie Creek
306	Dome Hill
308	Slate Point
309	Florence
311	Sherwin Creek
312	Peter Ready
316	Riverview
401	Big Cove
402	Blacktail
405	Corral Hill
407	Hungry Ridge
408	Meadow Creek
410	Earthquake
411	Whitebird Creek



501	Green Mountain
502	Mallard Creek
503	Moose Butte
505	Red River
506	Big Creek
507	Bull Creek
509	Cove Rec. Stock
512	Little Mallard Cr.
514	Salmon R. Breaks
515	Upper Barg./Running Cr.
516	Siegel Creek
704	Glover Ridge
705	Hamby
707	Tahoe-Clear Creek
801	American River
802	Elk Summit
803	Deadwood
804	East Fork
805	Kirks Fork
806	Newsome Creek
807	Elk Creek-Lick Creek

RANGE

RECREATION



Item 1a:	Recreation Visitor Days
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	5 Years (FY 1993)
Variability Which Would Initiate Further Evaluation:	Significantly different trends in recreation use occurring on the Nez Perce following a 5-year evaluation.

Discussion:

During the past several years, the Recreation Information Management (RIM) system has been in a state of flux pending the approval of a new system at the National level. All that is currently being reported is recreation use by activities, and in most cases the estimates of use are not statistically accurate.

Monitoring Results:

RECREATION USE ESTIMATES BY ACTIVITY - FY 1988-1993

	Recreation Use (MRVD)[1]					
Activity Category	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93
Camping, Picnicking, and Swimming	207.0	241.9	241.9	241.9	241.9	243.8
Mechanized Travel and Viewing Scenery	173.6	193.2	193.2	201.5	202.7	203.2
Hiking, Horseback Travel, and Water Travel	75.3	76.6	76.6	84.0	89.7	90.3
Winter Sports	10.0	10.4	10.4	13.3	13.4	14.1
Resorts, Cabins, and Organizational Camps	10.0	11.5	11.5	7.6	7.6	7.6
Hunting	88.9	91.4	91.4	91.4	95.2	95.4
Fishing	31.5	33.7	33.7	33.7	33.7	33.7
Non-Consumptive Fish and Wildlife Use	2.0	3.2	3.2	3.2	3.3	3.3
Other Recreational Activities	57.5	59.6	59.6	60.6	60.6	60.6
Total	655.8	722.5	722.5	737.2	748.1	752.1
Wilderness Use (included above)						
Gospel-Hump	21.5	21.5	21.5	21.5	21.5	21.7
Frank Church-River of No Return	10.0	10.0	10.0	10.0	22.0	22.1
Selway-Bitterroot	51.6	51.6	51.6	51.6	51.6	51.7
Total (included above)	83.1	83.1	83.1	83.1	95.1	95.5

[1]Thousand recreation visitor days

Evaluation of Monitoring Results:

The results of monitoring recreation use were scheduled to be fully evaluated in the fiscal year 1992 Monitoring and Evaluation Report. Apart from traffic count data, however, little effort was placed on gathering accurate visitor use information in 1993. Accuracy of RIM use estimates will improve only when gathering such information is given a priority. The lack of a National system also needs to be remedied. The Regional Office is taking steps to assist in improving our visitor use data by participating in the development of a nationwide format for reporting visitor use.

Item 1b:	Acres of Recreation Opportunity Spectrum (ROS) Category
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	5 Years (FY 1992)
Variability Which 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 specified in the Plan.

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 and recreation activities and experiences. The Nez Perce has been inventoried, mapped, and divided into four ROS classes. Currently, the Forest has no rural or urban class settings.

Monitoring Results:

Recreation Opportunity Spectrum (ROS) mapping for the existing situation was completed in 1979. No subsequent mapping has been done on a Forestwide basis since then to update ROS categories or to determine adopted ROS classifications for areas resulting from Forest Plan implementation. On individual projects and areas, ROS is being considered most of the time as part of the environmental analyses. This does not present a Forestwide picture, however. A comprehensive review of ROS changes will be needed to determine if Forest Plan direction is being met.

From interim reports, it is evident that timber harvest activities and road construction in previously unharvested and unroaded areas are substantially reducing areas of semi-primitive non-motorized and motorized ROS classes, converting these to roaded natural class. This is consistent with effects identified in the Forest Plan Environmental Impact Statement.

In fiscal year 1993, several projects on the Nez Perce National Forest were chosen at random for interdisciplinary team monitoring. Most of the interdisciplinary teams included a District employee with responsibilities in recreation. Documentation of these reviews indicated that recreation was often considered in environmental analyses and ROS was usually being used as a tool to assess the projects.

Evaluation of Monitoring Results:

In reviewing what has been completed using ROS, it has become evident that another category, roaded modified, needs to be formally adopted for use by the Forest. Roaded modified, used throughout the Pacific Northwest Region of the Forest Service, has been used in some Nez Perce 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. A Forest Plan amendment would be the best way to formally adopt the roaded modified ROS.

In 1990, the three north Idaho Forests sponsored an ROS training session which was well attended. This has helped in the understanding and application of ROS to the Nez Perce NF. With changes in personnel and with heightened awareness of recreation, more needs to be done. What is needed is a review and

revision of ROS maps Forestwide, incorporation of ROS into all environmental analyses, and a mechanism for updating ROS acreage changes in a data base.

Item 2a:	Off-Road Vehicle Impacts
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	5 years (FY 1992)
Variability Which Would Initiate Further Evaluation:	Unacceptable impacts caused by off-road vehicle use.

Monitoring Results:

The Off-Road-Vehicle (ORV) Monitoring Plan referenced in Appendix O of the Nez Perce Forest Plan was replaced with an Access Management Monitoring Plan for the Forest. Methodology for the systematic monitoring of ORV use has not been completed.

ORV use on the Forest has been increasing in popularity and variety. Snowmobiles, three- and four-wheel all-terrain vehicles, and four-wheel drive vehicles all contribute to this use. Conflicts exist among users, particularly on newly reconstructed trails with established foot and horse use.

The most prevalent recreation use violation is illegal use of vehicles on closed roads, many of which are gated. Use is restricted on many roads for wildlife security, to prevent soil erosion, and to reduce road maintenance. However, no in-depth monitoring has been conducted to determine whether adverse effects have occurred due to ORV use. Off-road vehicles can be damaging to soil, water, and vegetation. This is particularly true where trail systems with a 24-inch tread width are used by vehicles with 42 to 52-inch tread width. Other damage by ORVs occurs off roads and trails through hill climbs and in ORV play areas.

Each year, gates are broken or circumvented, with resultant impacts. Efforts to reduce these impacts include posting of up-to-date orders at each gate, explanatory signs describing reasons for the closures, increased enforcement actions, publicity of successful prosecutions, and weekend hunter patrols to provide contact with visitors and an opportunity to explain road restrictions.

Review of randomly selected projects chosen for monitoring indicate that little is being done in the way of ORV monitoring. Specific instances of detrimental effects of ORV use are handled on a case-by-case basis. Monitoring also identified that recreation use, particularly motorized, is being used as the principle mitigator for timber harvest. This is having significant effects on the long-term potential for recreation use and opportunities on this Forest.

Evaluation of Monitoring Results:

Through further development and implementation of the Access Management Plan, the Forest needs to develop a systematic method to monitor ORV use and impacts. Some of the methodology is documented in the Access Management Guidelines, but not enough to satisfy the requirements of the Forest Monitoring Plan.

Item 2b:	Adequacy of Cultural Resource Protection, Impacts on Cultural Resources
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	5 years (FY 1993)
Variability Which 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.

Monitoring Results:

During fiscal year 1993, 22 projects were inventoried for compliance with Section 106 of the National Historic Preservation Act as specified in the Forest Plan. The total number of projects inventoried was limited due to budget constraints. As a result, 2,290 acres were inventoried for cultural resources and 24 new archaeological sites were recorded.

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

Cultural Resource Inventory Results

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

In addition to the new sites recorded, 32 previously recorded sites were revisited and their documentation updated. Of the 32 sites monitored, 31 were determined as eligible for nomination to the National Register of Historic Places (NRHP). Specific mitigation measures were recommended for the preservation of these 31 NRHP eligible sites.

Adequacy of Cultural Resource Protection

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

In one noninventoried (nonproject related) area, vandalism/damage was observed.

The University of Idaho Anthropology Department, in Partnership with the Forest Service, conducted a Passport in Time (PIT) project in August 1993. "PIT" provided the opportunity for individuals and families to work with professional archaeologists and historians to learn about historic preservation projects. This project, entitled "Florence Tells Her Secrets," was sponsored by the Salmon River Ranger District. It involved the excavation of a collapsed structure in the historic old Florence townsite. The results of this archaeological investigation will help evaluate the National Register of Historic Places (NRHP) eligibility status of this site. The University will provide a final report on the results of this evaluation testing. This report will include a detailed description of findings. The results of this project will hopefully contribute towards a future long-term management plan for the historic Florence Mining District.

Evaluation of Monitoring Results:

None of the 32 sites monitored were impacted. Monitoring of the 32 sites revealed that the recommended protection measures were effective.

One current method being used to monitor cultural resources includes re-surveying sites and recording discernible effects or changes through completion of site report amendments or updates.

In some cases it would be valuable to establish measurements for more precise monitoring of sites eligible to the National Register of Historic Places. This could be 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 would allow us to accurately detect and document any changes or effects on a site during monitoring.

With the current Cultural Resource Management (CRM) funding level it is not feasible to implement this procedure. An increase in the CRM 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 on-going management activities or are located in highly used areas such as along the Salmon and Selway Rivers.

There is a need to provide better protection for the cultural resources in the Pilot Knob/Pilot Rock Nez Perce Indian religious rites area and other religious rites areas that are located on the Forest.

Item 2c:	**Limits of Acceptable Change in Wilderness**
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	5 years (FY 1992)
Variability Which Would Initiate Further Evaluation:	If, after a 5-year review period, changes in wilderness exceeded acceptable limits.

Specific Items Monitored for the Nez Perce National Forest portion of the Selway-Bitterroot Wilderness:

The following Forest Plan monitoring requirements have been identified in Appendix A of the Selway-Bitterroot Wilderness (SBW) General Management Direction, 1992 update.

Item 1: Impacts of human activities on the composite wilderness resource

No monitoring was conducted in FY93.

Item 2: Impacts of management activities on the composite wilderness resource

No monitoring was conducted in FY93.

Item 3: Number of sites per square mile

Discussion:

A "site" will include any area of human impact, including discontinuous areas where use is likely to be by the same group, such as stock holding areas, or separate tent spots. For purposes of determining sites per square mile, this also includes dams and administrative sites, but does not infer that either will be removed. Outfitter base camps within the SBW are not subject to the impact level standard, but will be counted towards "maximum number of sites per square mile". Base camp impacts will be managed through the outfitter's special use permit, and base camp standards will be identified when management direction for special uses is updated. Impacts are evaluated by using a standard procedure that measures the degree of change such as vegetation loss, soil disturbance, damage to trees, developments, cleanliness, etc.

Monitoring Results:

Twenty percent of the total identified sites were inventoried in FY93 as scheduled in the Forest Plan.

Evaluation of Monitoring Results:

Data will be analyzed in FY94.

Item 4: Number of sites at a particular impact level per square mile

Monitoring Results:

Twenty percent of the total identified sites were inventoried in FY93 as scheduled in the Forest Plan.

Evaluation of Monitoring Results:

A total of twenty-nine "problem areas" where human-caused impacts do not meet Forest Plan standards have been identified on the Moose Creek Ranger District. A detailed monitoring report which includes a listing of problem areas has been prepared for the SBW (Selway-Bitterroot Wilderness, 1993, State of the Wilderness Report). Seven of the problem areas were identified and reported in FY93.

Item 5: Number of parties encountered per day

Discussion:

Although Forest Plan standards to evaluate SBW Montioring Items 5 & 6 were established in the SBW General Management Direction, 1992 update, no reliable method for actual data collection has been developed to date. In FY93 the Aldo Leopold Wilderness Research Institute was working to develop a field data collection process.

Monitoring Results:

Limited field data was collected in FY93 to support research and development of new methodology.

Evaluation of Monitoring Results:

Data is being analyzed by the Aldo Leopold Wilderness Research Institute.

Item 6: Number of other parties camped within site or sound

Monitoring Results:

Limited field data was collected in FY93 to support research and development of new methodology.

Evaluation of Monitoring Results:

Data is being analyzed by the Aldo Leopold Wilderness Research Institute.

Item 7: Problem areas managed to correct substandard conditions

Monitoring Results:

At current funding levels, funding has not been available to correct substandard sites.

Evaluation of Monitoring Results:

Problem areas may or may not be newly impacted sites. Many of the identified problem areas are old sites which have only recently been inventoried.

Item 8: Identification and correction of substandard signing

Monitoring Results:

In FY93, ten percent of the Moose Creek District's trail signs were replaced and brought up to standard.

Evaluation of Monitoring Results:

The District is now eighty percent signed to standard. Continued emphasis on replacement of substandard signage and placement of new signs will be required to bring us into full compliance. Trail, boundary, and portal signing still need funding.

Item 9: Evaluating maintenance and reconstruction project plans against management direction

Monitoring Results:

All trail maintenance and reconstruction projects were programmed according to opportunity class objectives identified in the Forest Plan.

Evaluation of Monitoring Results:

While all funded trail maintenance and reconstruction projects complied with Forest Plan direction, the GAO report (GAO/RCED-89-182. Report to the Chairman, Subcommittee on National Parks and Public Lands, Committee on Interior and Insular Affairs, House of Representatives. "Maintenance and Reconstruction Backlog on National Forest Trails") identifies a huge backlog in construction for the Forest. At present budget levels we are holding our own, but certainly not gaining enough to eliminate the backlog within the foreseeable future. We are not meeting the intent of monitoring Item 9 in the SBW General Management Direction.

Item 10: Achievement of trail maintenance objectives

The following are the different types of trails that are being monitored under this monitoring item:

Mainline - Primary facility designed to provide access to a large block of land, usually at the easiest difficulty level. This facility will normally provide portal to portal or major access to points of intersection with secondary systems and provide for multi-purpose management objectives. Use is normally 100 users or greater per season. Maintenance should be performed annually or biannually.

Secondary - Secondary facility designed to provide internal access or disperse users from mainline facilities. These facilities are usually in the more difficult class and use is less than 100 users per season. Maintenance is usually performed every 2 to 3 years.

Way - (Primitive) Low priority system designed to service an area usually of hiker standard in the most difficult class. The system services annually less than 100 people. Maintenance is usually user performed or thr trail is reviewed every 3 to 4 years for public safety erosion hazards.

Monitoring Results:

In FY93, trail maintenance objectives were met on 98 percent of the mainline trails, 10 percent of the secondary trails, and 5 percent of the way trails.

Evaluation of Monitoring Results:

Recent trail maintenance funding levels are allowing the Moose Creek District to meet Forest Plan standards for mainline trails. At present funding levels, maintenance standards are not being met on approximately 50 percent of the District's secondary trails, and nearly 100 percent of the way trails. Many of the District's way trails have been without maintenance for 30 years.

Item 11: Achievement of trail reconstruction objectives

Monitoring Results:

Trail reconstruction objectives were met on all FY93 funded projects.

Evaluation of Monitoring Results:

Reconstruction objectives are being met on funded projects. Because of logistics and short funding we are having problems meeting established time frames for Archeological Evaluations. These evaluations are necessary for the NEPA process and accomplishing targeted gates in the Capitol Investment funding program. The District and Forest are working with the Region and State Historical Preservation Office to come to a better understanding of the process, sharing the impacts.

Item 12: Impacts to non-system trails

Discussion:

Non-system trails are noted and mapped in conjunction with other activities. As problem areas are identified, the specific impacts are described and reported in the SBW State of the Wilderness Report.

Monitoring Results:

Eight new non-system trails were identified on the Moose Creek Ranger District in FY93. The District now lists a total of 15 non-system trails in the SBW State of the Wilderness Report.

Evaluation of Monitoring Results:

Although problem areas are being identified, current funding levels are not adequate to correct problems.

Item 13: Number of landings per day

Discussion:

"Two indicators will be used to evaluate the level of airfield use; 1) number of landings/day/airfield, and 2) number of landings/year/airfield. Standards will be determined based on the results of collecting four years of reliable data per airfield, and a study to determine the perceptions of all wilderness user types regarding aircraft use of the Selway-Bitterroot Wilderness. (Data for Moose Creek is adequate at present, but Fish Lake will require 4 years of data, and Shearer will require 3 years of additional data.)" Selway-Bitterroot Wilderness General Management Direction, 1992 Update.

Monitoring Results:

In FY93 landings at Moose Creek airstrip were monitored during the heavy use season from May through November. Flights before and after that period were not counted. A total of 537 flights were logged with an average of 2.75 landings per day calculated for the heavy use period.

No monitoring was conducted at Shearer airstrip.

Evaluation of Monitoring Results:

No monitoring standard has been defined to date. Poor flying weather in FY93 probably reduced airfield use.

Item 14: Number of landings per year by user type

Monitoring Results:

A total of 537 landings were recorded during the heavy use season from May through November at the Moose Creek airstrip. This total consists of 18 Forest Service, 375 private, and 144 outfitter landings.

No monitoring was conducted at Shearer airstrip.

Evaluation of Monitoring Results:

Total landings per year at Moose Creek airfield is within standard. No monitoring standard for number of landings per year by user type have been established for Moose Creek airfield.

No monitoring standards have been defined for Shearer airfield to date.

Item 15: Proportion of landings by user type

Monitoring Results:

Moose Creek airstrip landings by user type: Forest Service 3%, private 70%, outfitters 27%.

No monitoring was conducted at Shearer airstrip.

Evaluation of Monitoring Results:

No monitoring standards have been defined.

Item 16: Length of stay

No monitoring was conducted in FY93. No monitoring standards have been defined.

Item 17: Condition of runway surface and facilities

Monitoring Results:

Both Moose Creek and Shearer airstrips were inspected by a representative of the State Division of Aeronautics and Northern Region Aviation and Fire Management personnel in FY93.

Evaluation of Monitoring Results:

Inspectors rated both Moose Creek and Shearer airstrips in good condition.

Item 18: Change in vegetation cover on runway surface

No monitoring was conducted in FY93.

Other Wilderness Monitoring:

Monitoring Results:

Detailed reports to Congress were prepared in 1993, describing overall management of the Selway-Bitterroot, Frank Church-River of No Return, and Gospel-Hump Wildernesses. These reports provide good monitoring information on the Nez Perce National Forest's wilderness. Review copies of the reports are available on request for all the wildernesses.

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 currently being managed under the Selway-Bitterroot Wilderness General Management Direction, 1992. This document was originally signed by the Regional Forester in 1982 and was replaced by a Forest Plan amendment with the 1992 General Management Direction.

The 1992 amendment included Limits of Acceptable Change planning for recreation, trails, and airfield management. Management direction is currently being written for wildlife and vegetation management with additional planning scheduled for soil, water and air, administrative sites, and special uses.

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, to establish baseline information for the LAC process.

Frank Church - River of No Return:

This wilderness is currently being managed under a management plan tied to the Forest Plan. A coordinated four-Forest LAC process for validating management direction has begun. Campsite condition inventories are completed annually, as funding allows, to establish baseline information for the LAC process.

Status of Wilderness Fire Management Plans for Wildernesses on the Nez Perce National Forest:

Selway-Bitterroot:

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

Gospel-Hump:

The fire management plan, suspended since 1988, has been revised and was in effect for the 1993 fire season. The plan does not allow for planned ignition.

Frank Church - River of No Return:

The fire management plan, suspended since 1988, was revised and in effect during the 1993 fire season. The plan does allow for planned ignition.

Coordinated Wilderness Management

Coordination of wilderness management programs and activities among adjacent administering units of the same wilderness has improved greatly during the past 2 years. Results of this coordination are evident in all wildernesses administered by the Nez Perce NF.

In the Gospel-Hump Wilderness, administered entirely by the Nez Perce NF (Red River and Salmon River Ranger Districts), preseason and on-the-ground coordination meetings were held in 1993. Information on 1993 accomplishments has been assembled for the annual report to Congress, and revision of the prescribed natural fire plan for the Gospel-Hump Wilderness is completed.

Coordinated management of the Selway-Bitterroot Wilderness (SBW) has been formalized by creating a SBW Leadership Policy Council and Steering Group comprised of members from the Clearwater, Bitterroot, and Nez Perce National Forests, as well as the Regional Office. For 1993 activities, a comprehensive Wilderness wide report has been prepared, entitled "Selway-Bitterroot Wilderness, 1993, State of the Wilderness Report." It contains a detailed monitoring report for the SBW.

A similar coordination structure has been established for the Frank Church-River of No Return Wilderness (FC-RONR). A number of significant accomplishments in organization and management occurred in FY 93. Key changes affecting the Nez Perce NF included continuing management of an additional 193,000 acres previously administered by the Bitterroot NF, and an expanded field and wilderness education effort. These accomplishments are documented in the 1993 Annual Wilderness Report for the FC-RONR Wilderness.

Evaluation of Monitoring Results:

A great deal of effort is being put into completion of the Selway-Bitterroot Limits of Acceptable Change (LAC) planning process, and into beginning the planning process for the Frank Church-River of No Return Wilderness. The result should include detailed resource analysis, and both implementation and effectiveness monitoring requirements. Wilderness management is being given close scrutiny at the local, regional and national levels. Most management activities receive detailed environmental analysis. Problems brought up most by wilderness managers include insufficient funding and personnel, concerns about law enforcement under the new system, and a continuing need to better communicate with the public and Forest Service employees regarding the proper use and management of wilderness.

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.

Item 2d	Achievement of Visual Quality
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	5 years (FY 1992)
Variability Which Would Initiate Further Evaluation:	After 5 years of monitoring, an assessment indicates visual quality objectives are not being met.

Monitoring Results:

Visual Resource Management (VRM) classes were mapped Forestwide over ten years ago, prior to the development and implementation of the Nez Perce National Forest Plan. The major task remains to review these original VRM objectives and update, or adapt, 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 (VQO's). It modified existing standards to remove inconsistencies in VQO's, to make the standards more attuned to procedures described in Agriculture Handbook 462 - The Visual Management System, and to specify a methodology for documenting visual quality decisions.

The Nez Perce National Forest has not employed a full-time landscape architect for nearly a decade. Visual quality, however, is being considered and documented in most on-the-ground activities. Through a combination of contract landscape architect involvement, assistance from the Forest Architect, and District visual resource management paraprofessionals, most Districts are making adequate progress toward meeting the visual quality objectives of the Forest Plan. Analysis is being made on a project-by-project basis. When VQO's are adopted, the areas are mapped and documented.

Evaluation of Monitoring Results:

On most Districts, some progress is being made in understanding and achieving VQOs. The Forest program relies upon District paraprofessional visual resource specialists, contract landscape architects, and occasional assistance from the Forest Architect. Although this assumption of responsibilities seems to be resulting in achievement of VQO's on some Districts, the program needs to be strengthened on others.

Item 2n:	Management of Designated or Eligible Wild, Scenic, or Recreational River Segments
Frequency of Measurement:	Annually (October 1, 1992 to September 30, 1993)
Reporting Period:	5 years (FY 1992)
Variability Which Would Initiate Further Evaluation:	Following a 5-year period, information which would indicate management direction for designated or eligible wild, scenic, or recreation rivers is not being followed.

Discussion:

The Nez Perce National Forest manages parts of four rivers classified under the Wild and & Scenic Rivers Act, and 13 rivers that are eligible for classification. The four classified rivers include the Selway (40 miles Wild, 21 miles Recreational); Middle Fork Clearwater (11 miles Recreational); Rapid (12 miles Wild); and Salmon (66 miles Wild).

Eligible river segments are listed in Appendix P to the Forest Plan. Appendix P also includes a listing of outstanding features of each eligible segment.

Monitoring Results:

Management of Designated Rivers:

Salmon (Wild) -- Compatible uses occurring on the Salmon River include private and outfitted boating (float and powerboat), administration of scenic easements, scenic easement acquisition, land exchange, dispersed recreation site maintenance, and trail maintenance. Some mining activity has been occurring on private property within the corridor. Lack of funding for the lands program has limited land exchanges and the acquisition of additional scenic easements, and there has not been adequate funding in recreation to adequately monitor the recreation program on the river.

Middle Fork Clearwater -- Administration of scenic easements shows compliance with direction.

Selway -- The **Wild** segment of the Selway is managed through the management plan direction and a very strict permit season. The river program is staffed with one seasonal river ranger, volunteer river assistants, and a shuttle service. Six patrol trips down the river were made during the control season. The purpose of the patrols is to maintain dispersed recreation sites, monitor use, and serve the public.

The **Recreational** segment of the Selway is continually monitored for compliance with direction for road management, administrative facilities, scenic easements, visual management, trail management, recreation, and water quality. Because of low funding, lack of adequate administration of scenic easements is anticipated to become an issue in the near future.

Rapid River -- Trail work and grazing occurred along this corridor. These are in compliance with management direction.

Management of Eligible River Segments

Bear Creek, Moose Creek, and Three Links, located on the Moose Creek Ranger District, are recommended to be managed as Wild rivers. Their management direction is contained in the Selway-Bitterroot Wilderness Management Plan. These strategies comply with area management direction.

Slate Creek -- Grazing, road maintenance, mining, trail work, and fish structure construction all occurred within the segment eligible as a Recreational River. These activities are compatible with management direction. The upper reaches of the creek are also eligible for Wild river classification.

White Bird Creek -- A six mile segment located on private and National Park Service lands outside of the Forest boundary was found to be eligible for Recreational classification during the Forest planning process. The State of Idaho Department of Water Resources (IDWR) has agreed to be the lead for a suitability study for this segment. The study will be completed when the IDWR completes the Salmon River basin component of the State Water Plan.

Running Creek -- No management activities, in compliance with Forest Plan direction (trail clearing by users along Trail 529). This stream is eligible for Scenic and Recreation classification.

Bargamin Creek -- Trail maintenance was in compliance with Forest Plan and Frank Church-River of No Return Wilderness Management Plan direction. Reaches of Bargamin Creek are eligible for Scenic and Wild river classification.

Lake Creek -- Trail maintenance was in compliance with Forest Plan and Gospel-Hump Wilderness Management Plan direction. Reaches of Lake Creek are eligible for Recreational and Wild river classification.

Meadow Creek (Tributary to Selway River) -- Grazing allotment is in use status in compliance with Forest Plan direction. Reaches of Meadow Creek are eligible for Recreational and Wild river classification.

South Fork Clearwater River (Recreational) -- Modification of a clearcut unit on the Shooting Star Timber Sale occurred in FY 1990 because it can be seen from the South Fork Highway (M.P. 37). Minor aspects of the harvesting became visible prior to modification. Idaho Highway Department waste dump sites are a visual concern (do not meet partial retention), and occupy potential visitor parking sites. Visual resource management on the Shooting Star timber sale area was analyzed by a certified landscape architect during the NEPA process.

Johns Creek -- A deeply incised canyon with chinook salmon, steelhead and cutthroat trout habitat provides outstanding vistas and ruggedness. Current management is compatible with maintaining eligibility as a potential Wild river.

Lower Salmon River -- A bill was introduced in Congress in 1992 for designation of the lower Salmon River, but not acted upon. Current management is compatible with maintaining its elgiblity as a Recreational river.

West Fork Gedney Creek -- The stream includes a diversity of geology, vegetation, and other biological components such as spawning habitat for chinook salmon and wild steelhead trout. Current management maintains eligibility as a potential Wild River.

Suitability Studies

Suitability studies are currently being completed on the following streams considered to be eligible: Bear Creek complex, Moose Creek complex, Three Links Creek Complex, Gedney Creek complex, and Running Creek. It is anticipated that the draft Legislative Environmental Impact Statement (LEIS) for these studies will be available for public review in August of 1994. It is also anticipated that the resource assessment phase (affected environment) of the Meadow Creek study will be completed by the end of FY 94.

Funding is not currently available to complete suitability studies on the other eligible streams on the Forest. The current Regional strategy is to complete the suitability studies of the remaining streams as an integral part of the Forest Plan revision process.

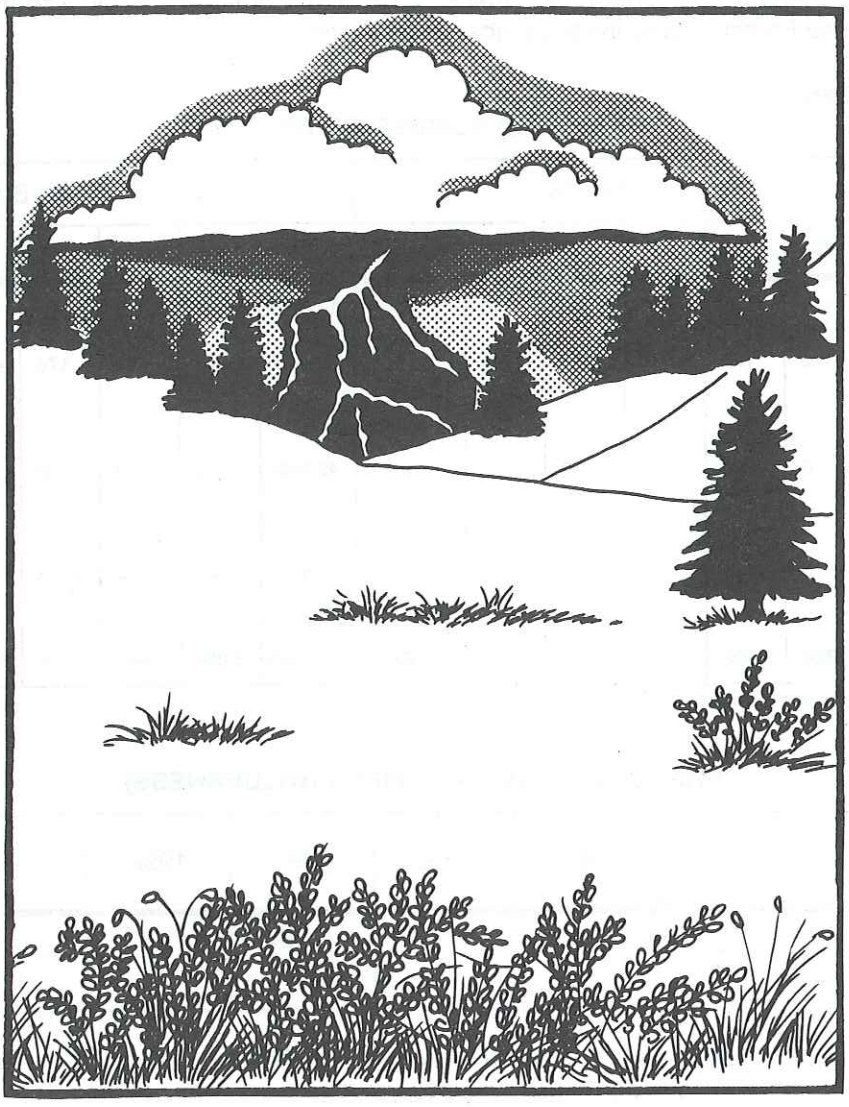
Evaluation of Monitoring Results:

Based on limited monitoring information, it appears that management of designated Wild, Scenic, and Recreational Rivers meets management direction for the segments. The Middle Fork of the Clearwater River System Management Plan needs to be updated and administration of scenic easements needs more emphasis due to increased land sales and subdivisions.

Management of eligible segments also appears to meet Forest Plan management direction.

Lack of funding in the recreation and lands program inhibits the monitoring and management of both designated and eligible river segments. Although progress is being made on completion of the river suitability studies, much work remains on completing studies for some of the more complex and controversial eligible rivers such as Meadow Creek and the South Fork of the Clearwater River.

FIRE, INSECT & DISEASE



Item 1k:	Acres and Numbers of Wild and Prescribed Fires
Frequency of Measurement:	Annually (October 1, 1992 to September 30, 1993)
Reporting Period:	5 years (FY 1993)
Variability Which Would Initiate Further Evaluation:	Unusual number of person-caused fires over the 10-year average indicating a trend of a specific cause(s). Unusual number of acres burned if unexplainable, such as unusually severe fire danger based on the burning index and the energy release component.

Discussion:

The drought conditions broke in 1993 and along with it a substantial reduction in the number of wild fires and acres burned. Readiness consisting of trained initial attack fire-goers along with modern equipment ranked high on the Forest priority list to combat wildfire events.

Monitoring Results:

ACRES AND NUMBER OF WILDFIRES

	Number of Fires							Acres Burned						
Types of Fires	1988	1989	1990	1991	1992	1993	10-Yr.Avg[1]	1988	1989	1990	1991	1992	1993	10-Yr.Avg.[1]
Lightning Fires	122	310	178	238	264	49	173	102,236	8,850	95	176	44,913	2	17,819
Lightning Fires with Control Strategy	106	310	155	238	216	48	160	59,426	8,850	83	176	44,741	2	12,142
Lightning Fires with Contain, Confine Strategy	16	0	23	0	48	1	13	42,810	0	12	0	172	0	5,928
Person-caused/ Misc.Fires	21	16	24	32	16	8	17	3,707	38	548	2,031	53	4	2,200
Total Fires	143	326	202	270	280	57	190	105,943	8,888	643	2,207	44,966	6	20,019

[1] The 10-year average is the average for the past 10 years.

PRESCRIBED NATURAL FIRES (WILDERNESS)[1]

	1988	1989[3]	1990	1991	1992	1993	10-Year Avg.[2]
Number of Fires	3	0	2	13	12	5	13
Acres Burned	520	0	0	3,311	39	0	1,878

[1] See the Selway-Bitterroot Wilderness "State of the Wilderness Report" fire section for further information.
[2] The 10-year average is the average for the past 10 years.
[3] In 1989 there was a moratorium on prescribed natural fires.

Individual fire reports were completed on all 1993 fires.

The Nez Perce 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.

The Forest has two fuels targets (acres). One concerns the use of fire protection dollars, and the other, brush disposal funds. The target for use of fire protection dollars was 1550 acres. This target was exceeded by 113 acres. Both natural and activity fuels (logging debris) were treated with these funds.

The Forest target, 2,200 acres, treatment of activity fuels with the use of brush disposal funds, was attained. In fact the Forest exceeded it's target by 1,128 acres. Burning conditions were generally quite favorable this past year.

The Forest Fire Management program was not funded at the most cost-efficient level as described by the National Fire Management Analysis System. Funding did increase in FY93, but severity funding was unavailable, nor was it needed.

Fuel treatment/prescribed fire was planned and utilized in accomplishing land management objectives.

Evaluation of Monitoring Results:

All Individual Fire Reports were submitted as required. Forest Plan and Regional projections for treatment of activity fuels were met. Treatment projections of natural fuels were attained.

Item 7:	**Insect and Disease Activity**
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	Significant increases in population or damage levels of insects or diseases

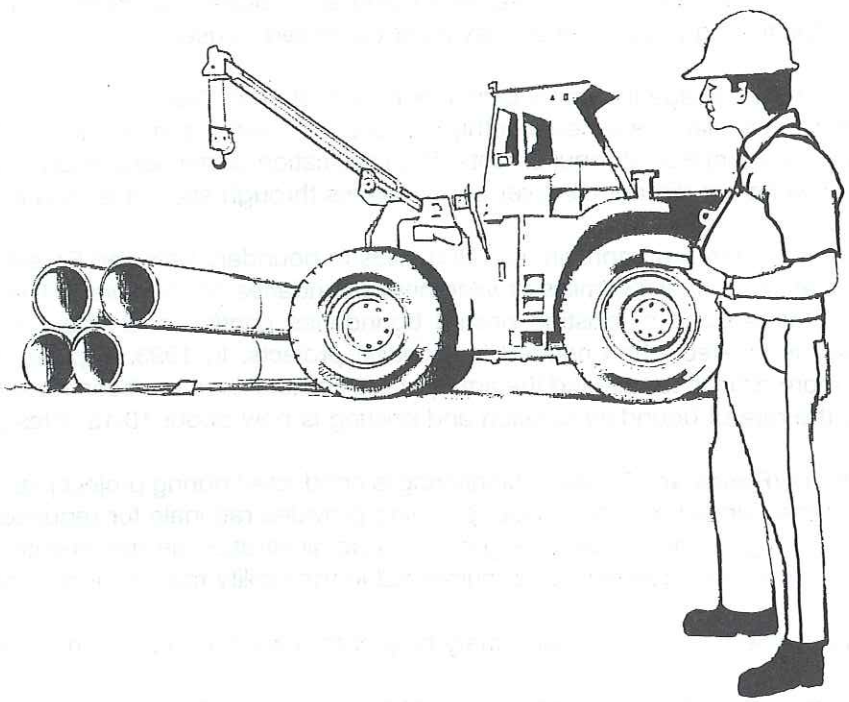
Monitoring Results:

Small populations of insects occurred throughout the Forest. The cool, moist summer of 1993 likely contributed to reduced insect damage levels compared to prior years. Root disease continues to be a major problem. in Douglas-fir and a minor problem in other species.

Evaluation of Monitoring Results:

In general, insect and disease conditions do not warrant area-wide control efforts. Silvicultural prescriptions will address stand treatment needs and mitigate the effects of insect and disease activity where possible. General insect and disease conditions will continue to be monitored to determine trends.

FACILITIES



Item 2k:	Mitigation Measures Used for and Impacts of Transportation Facilities on Resources
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	5 years (FY 1992)
Variability Which 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 Forest include buildings and administrative sites, property boundaries, and the transportation system of Forest roads and trails. Construction and maintenance of all facilities improves the safety and health of both Forest employees and the visiting public.

■·■·■·FACILITIES·■·■·■

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 County laws and regulations govern the construction, maintenance, and use of structures, potable water systems, and sewage treatment systems. 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 radon and asbestos in buildings, air, and water.

The Forest has three "Public Community" water systems that serve Fenn Ranger Station, Red River Ranger Station, and Slate Creek Ranger Station. There are also three other seasonal work center water systems and ten recreation site water systems. Bacteriological testing is done monthly during the year at the community systems and monthly during the use season for the other systems. This year, analysis for volatile organic chemicals, secondary organic chemicals, nitrite/nitrate, and lead-copper was done on the community systems. If the systems fail testing requirements, they must be 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 NPDES (National Pollution Discharge Elimination System) Permit requirements. The information is then forwarded to the Environmental Protection Agency. The Forest did not discover any problems through effluent testing this year.

Property Boundaries -- There are approximately 350 miles of boundary between Forest lands and private landowners. There is an additional 330 miles of wilderness boundaries on the Forest. These boundaries are not yet all marked. Maintenance of existing posted boundaries continues at about 4-6 miles per year. Wilderness boundary is located when needed for specific projects. In 1993, approximately 6 miles was located. Due to the more difficult terrain and the areas where corners have not been reestablished for nearly 100 years remains, the rate of boundary location and posting is now about 10-15 miles per year.

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 specific measures. Five specific practices are:

a. **Transportation Planning,** which is a detailed office effort using maps, photos, historical 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.

b. **Route location,** which ground-truths the results of the planning, refines locations,and provides further information on possible problem areas.

c. **Contract Preparation,** which assures that mitigation measures are incorporated into drawings and specifications to be followed when the facility is built.

d. **Administration,** which assures compliance with the contract.

e. **Maintenance,** 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:

f. **Designed and controlled cut slopes, fill slopes, road width, and road grades.** These effectively reduce sediment production by fitting the roads to the land.

g. **Designed and controlled ditches, cross drain spacing, and culvert discharge.** 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.

h. **Stabilization of road surface and ditch lines over 6 percent with competent rock** (rock that does not rapidly disintegrate). The effectiveness of this measure in reducing surface erosion from these sources is dramatic, often over 90 percent.

i. **Slash Filter Windrows.** 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 a very effective treatment; sediment leaving fill slopes is reduced by 80 to 95 percent.

j. **Seeding and fertilizing cut slopes, fill slopes, and other disturbed areas.** 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.

Monitoring Results:

Implementation Monitoring: All engineering projects for FY 1993 included specific mitigation measures to reduce facilities' impacts on resources. The following mitigation measures were used (not all were used on every project).

- Windrowing of construction slash at the toe of the fill.
- Rock surfacing of the entire road or at contributing areas.
- Layer placement and compaction of major fills.
- Grass seeding and fertilization of cut/fill slopes and disturbed areas.
- Rocking of ditchlines.
- Incorporating critical logging system controls into the design to minimize length of time of exposed soil.
- 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 fillslopes at major culvert installations to control erosion.
- Installation of drop inlets at critical locations to control erosion.
- Construction of rock buttress retaining structures.

The following tables identify principal mitigation measures specified/implemented by road project.

Table 2k-1 MITIGATION MEASURES IMPLEMENTED ON PROJECTS IN FY 1993

Project	Planned Sediment Mitigation (%)	Windrow Slash	Rock Surfacing	Rock Ditches	Grass Seeding Fertilization	Straw Bales/ Mulch	SPS 204[3]	Layer Place Fills	Critical Logging Controls (designed into Package)	Temporary Waterbars	Gates Traffic Control	Total Project Cost $[4]
PUBLIC WORKS												
Red River Crushing	NA	NA	NA	NA	X	X	X	NA	NA	X	NA	388,810
Skookumchuck[2]	80	X	X	X	X	X	X	X	NA	X		265,544
Selway Bridges[2]	NA	NA	X	NA	X	X	X	NA	NA	X	NA	226,078
Nut Basin [1] [2]	80	X	X		X	X	X	NA	NA	X	NA	296, 714
TIMBER SALES												
Lower Cougar	80	X			X	X	X	X	X	X	X	606,320
Little Cougar		X	X	X	X	X	X	X	X	X	X	8,068
Silver West [2]	80	X	X	X	X	X	X	X	X	X	X	860,900
Twentymile	80	X	X	X	X	X	X	X	X	X	X	368,700
Chinese Rabbit Stew	70-80	X	X	X	X	X	X	X	X	X	X	1,411,085
Winter Surveyor	80	X	X	X	X	X	X	X	X	X	X	570,770

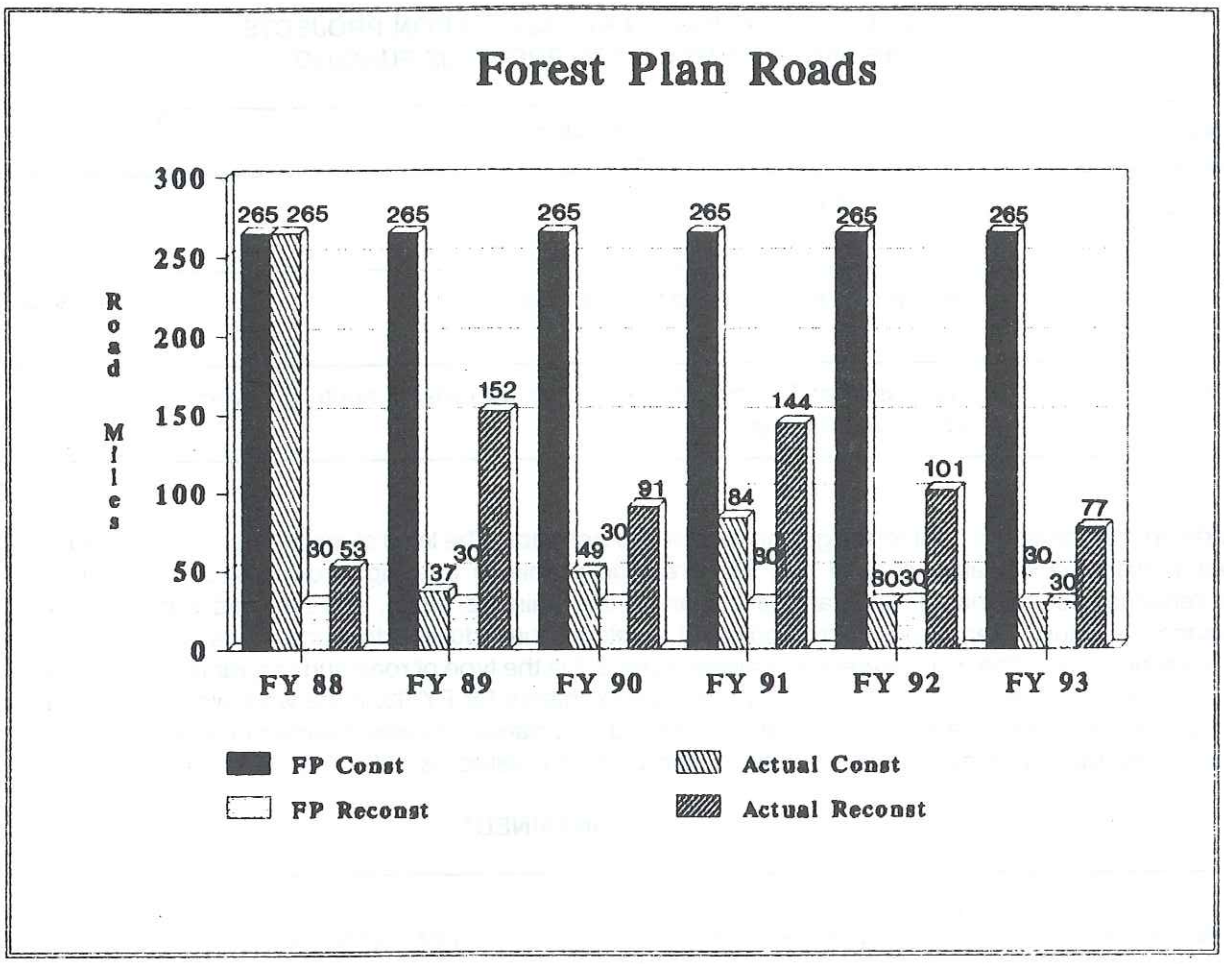
[1] These projects were designed to assist in providing an "upward trend" in the affected watersheds.

[2] These projects included reconstruction to address sedimentation concerns, safety, and/or user serviceability.

[3] Special Project Specification - These are mitigation measures for construction practices.

[4] Cost of mitigation measures is only a portion of the total project cost.

A total of 30 miles of road were constructed in FY93 and 77 miles of road were reconstructed. The Forest Plan predicted an average 53 miles of construction and 30 miles of reconstruction annually in the first decade. Table 2k-1a shows the miles of road constructed and reconstructed annually since FY88, compared directly with Forest Plan predictions.



While the annual miles vary, the total 283 miles of road constructed since 1988 is less than the 318 miles predicted in the Forest Plan. The total miles of road reconstructed far exceed the mileage predicted in the Forest Plan.

Road Maintenance

Over $50,000 of road maintenance funds was spent in FY 1993 on sediment mitigation projects. These included rebuilding the Cove Road Slide, repairing road ditches, reshaping roadways to improve drainage, installing various types of road drainage structures, cleaning ditches, cleaning or replacing culverts, and cleaning sediment traps.

Sediment mitigation was also accomplished through Forest Road Program funding as shown in Table 2k-2. These projects were accomplished solely to reduce their sediment contributions.

Table 2k-2 MITIGATION ON REHABILITATION PROJECTS THROUGH FOREST ROAD PROGRAM FUNDING

PROJECT	DESCRIPTION	COST ($)
Hydro Seeding Flat Iron Ridge	18 acres of road cut and fill reseeding	$18,000
Hydro Seeding Nez Perce Trial	16 acres of road cut and fill reseeding	$14,500
Forestwide Materials	Purchase seed, straw, and filter cloth for erosion control; culverts, woven-wire baskets	$10,000

Roads on the Forest are on a rotating schedule for maintenance. The level of maintenance varies by road. Level 1 maintenance takes care of only the drainage problems and signs on closed roads. Level 2 maintenance is on restricted roads and takes care of the drainage, signs, and the road surface for high clearance vehicles. Open roads are maintained at Levels 3-5 that address drainage, signs, and the surface for passenger cars. The only difference between levels 3-5 is the type of road surface, ranging from gravel to pavement. The following chart shows the accomplishments for FY 93. If the work was completed to Forest Service Manual standards, it is categorized "To Standards," If some maintenance was performed on the road, but it was not completed fully to standards, it is listed as "Less than Standard."

ROAD MILES MAINTAINED*

Maintenance Level	To Standard (Mi.)	Not To Standard (Mi.)
Level 1	513	537
Level 2	200	581
Level 3-5	400	532
Total	1113	1650

*Includes purchaser maintenance.

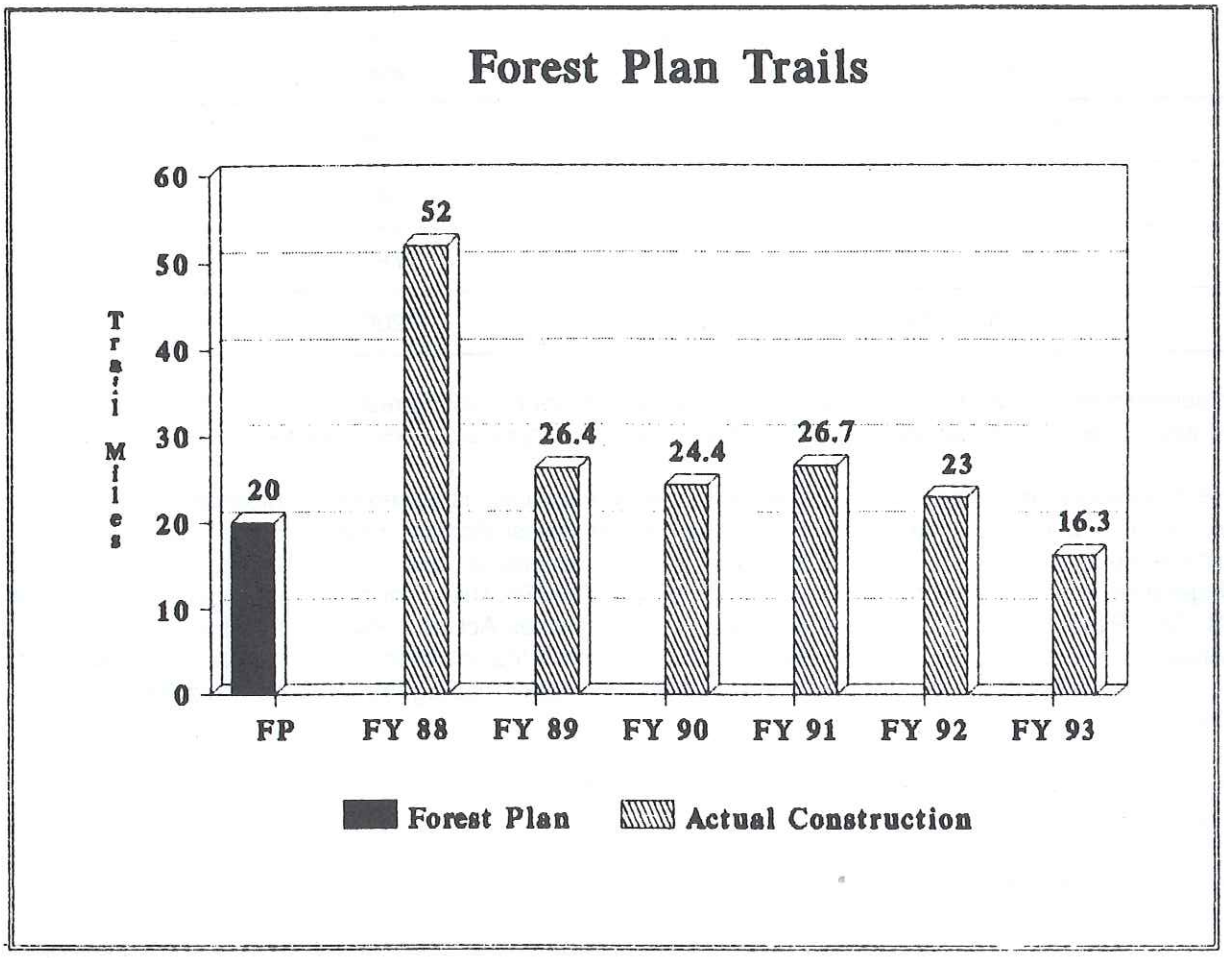
Restricted and open roads are periodically trimmed of overhanging brush and trees. The objective is to maintain sight distance for vehicle drivers and is a safety concern. In FY 93, 100 miles of road were brushed.

Signs along the roads are a safety item for the driving public and also give information. In FY 93, 50 new signs were installed on the Forest and 60 signs were replaced. These signs are installed following the Manual of Uniform Traffic Control Devices, which is a Federal Highway Standard and is the same for all Federal, State, and County roads in the United States.

Trails

There are currently 3,206 total miles of trail on the Nez Perce National Forest. The Forest Plan projected 20 miles of trail would be constructed or reconstructed every year. Chart 2k-1b shows how the miles of trail actually constructed or reconstructed exceeded the Forest Plan every year except FY 93.

2k-1b



In FY 93, 1,795 miles of trail had some level of maintenance. While the Forest Plan did not project the trail miles maintained each year, the Forest has been steadily increasing the accomplishment, from 1,064 miles in FY 88 to the 1,795 miles accomplished in FY 93.

TRAIL MILES MAINTAINED

Maintenance Level	Total Miles Maintained
Level I	1468
Level II	208
Level III	10
Less than Level I	109
Total Maintained	1795
Total System	3206

Implementation monitoring occurs during the normal execution of the Forest's workload. These documents are also on file in the planning records at the Forest Headquarters in Grangeville.

Effectiveness Monitoring: Effectiveness of mitigation measures is based upon information contained in the research summary "Reduction of Soil Erosion on Forest Roads," Intermountain Research Station General Technical Report INT-264 by Edward R. Burroughs Jr. and John G. King; "Effectiveness of Mitigation Practices and Specific Measures Associated With Facilities Proposed for Wingcreek-Twentymile EIS", Nez Perce National Forest, 1988; State Forest Practices Act and attendant BMP's; "Guidelines for Evaluating and Managing Summer Elk Habitat in Northern Idaho", Wildlife Bulletin No. 11, 1984, Idaho Department of Fish and Game; and in the "Nez Perce Access Management Guide", Nez Perce National Forest, 1988 as amended.

Based upon this information and field reviews, it is expected that required mitigation for projects implemented in FY 93 has been attained and will be met in FY 94.

Evaluation of Monitoring Results:

The measures and practices being used to reduce sedimentation are effective, but do not totally stop all sediment movement. Continual attention and sensitivity to the watershed resource is required to ensure desired results are achieved. Flexibility to incorporate research findings and to take advantage of innovative construction and administrative techniques needs to be maintained.

Item 2l:	Adequacy of Transportation Facilities to Meet Resource Objectives and User Needs
Frequency of Measurement:	Continuous
Reporting Period:	5 years (FY 1992)
Variability Which Would Initiate Further Evaluation:	If public opinion is significantly against the Nez Perce access management program or if the program shows serious negative impacts upon resources.

Discussion:

The monitoring of item 2l is continuous. Due to the nature of transportation systems and their impacts upon management and use of the Forest, this monitoring is both very important and very 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:

In 1984, Nez Perce Engineering instituted a traffic surveillance program, using current state-of-the-art inductive loop equipment. The program initially started with 15 and has grown to 45 sites. Future monitoring and evaluation will be limited with the reduction of funding in Engineering. New surveillance sites will be dependent on funding from other resource management areas.

The objective of having a traffic surveillance program is to provide managers data on use of selected Forest roads. This information can be utilized in (1) justification for commitment of capital investment funds for reconstruction of existing system roads; (2) preparation of Recreation Improvement Management (RIM) reports; (3) access management planning; (4) identifying high use/high maintenance roads, and allocation of road maintenance dollars to take care of them; and (5) design criteria, i.e., ADT (average daily traffic) counts, mandate turnout spacing, surface types, lane requirements, and signing. Utilization of the data in this report is not limited to the above applications.

To properly analyze traffic data, there needs to be a minimum of 5 years on record. At the present time, we have 5 to 9 years of data collected from 28 sites, and anywhere from 1 to 4 years on the remaining 12 surveillance sites. Analysis from sites with 5 or 9 years of collected data show fluctuations in use volume during the monitoring period. For the most part, volume fluctuation that we are experiencing is attributed to commercial use (logging), fire traffic, and road construction or reconstruction on a particular road. Without an in-depth study of the present data, we cannot reasonably project any long-term trends, but you can observe some high use periods which occur yearly on a particular road. There does not appear to be any noticeable increase or decrease attributed to recreational use. The data indicate the highest recreational use on monitored roads is during hunting season.

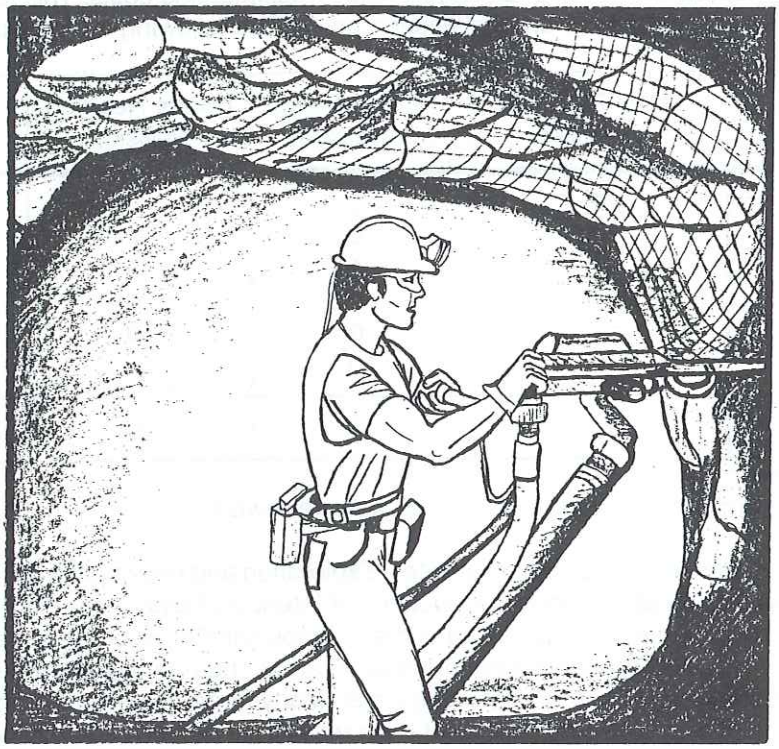
The three highest traffic volume roads on the Forest are #223, Selway Road; #221, Grangeville-Salmon Road; and #1614, Salmon River Road. These roads are arterials and collectors with a majority of the traffic on the County-maintained portions of these roads.

The Forest has implemented the Access Management Guide for 5 years. Many roads and trails are either restricted or closed to protect other resources.

Evaluation of Monitoring Results:

Effects of the access management program require time to be realized. Preliminary indication is that the Nez Perce Access Management program is working and that the Guide does provide the tools necessary for successful attainment of an integrated access management program. A formal program to monitor the effectiveness of road closures may be started in FY 94.

MINERALS



Item 2m:	Adequacy of Mining Operating Plans and Reclamation Bonds
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	Operating plans which need to be updated or modified; bonds which need to be increased, decreased, or returned; or case files which can be closed out.

Monitoring Results:

In order to meet Forest Plan direction in minerals, it is necessary to have Plans of Operations which 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. Item 2m measures how well the Forest is implementing the Plan in these areas. Monitoring data is obtained from case files, from routine inspections by District employees, and from interdisciplinary team field reviews.

Out of 56 active Plans of Operation, 11 need modification or updating to more accurately describe existing surface disturbance and/or changes in the operation. This is an increase from previous years and is partially a result of a more thorough review of the district files by new personnel and a smaller workload, which allow for more inspections of ongoing operations. A review of bonds associated with these plans indicated that 30 need to be increased or decreased to more accurately reflect reclamations costs. This is largely a result of updating many older bonds to reflect current reclamation costs. The following table displays this data:

Ranger District	Active Plans of Operation[1]	Plans Needing Modification	Bonds Needing Revision	Bonds Needing Release
Salmon River	7	0	0	8
Clearwater	1	0	0	0
Red River	16	1	3	0
Moose Creek	0	0	0	0
Selway	0	0	0	0
Elk City[2]	35	10	26	5
TOTAL	56	11	30	13

[1]Does not include Notices of Intent
[2]Previous years reflect estimates, this year all case files were reviewed.

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 and the listing of the chinook salmon as being threatened, in addition to greater analysis needs relating to watersheds and riparian areas, has greatly slowed response times to mining proposals. Regulation timeframes are not always met. Many large mining companies have dropped exploration and development operations on the Forest. As a result the Forest was able to administer ongoing and new operations to a higher level than in previous years.

In 1993 mining claimants were required to pay a rental fee for each mining claim owned. If the claimant owned 10 or fewer claims they could be exempted from the fee if they had a certain level of production or a valid notice of intent or plan of operation for exploration. As a result the Forest was flooded with about 150 notices of intent for very low level exploratory work.

Evaluation of Monitoring Results:

These monitoring results indicate that the Forest is actively working to improve the quality of its minerals management responsibilities in conformance with Forest Plan direction. The larger number of plans needing modified and bonds needing revised is a reflection of a more thorough review of district files and greater on the ground administration. Although 20 percent of plans need to be modified, the modifications are for the most part minor. Over 50 percent of the bonds on the Forest need to be revised. This also is a reflection of closer review of the district files and the need to update bonds to reflect reclamation costs.

The following chart 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.

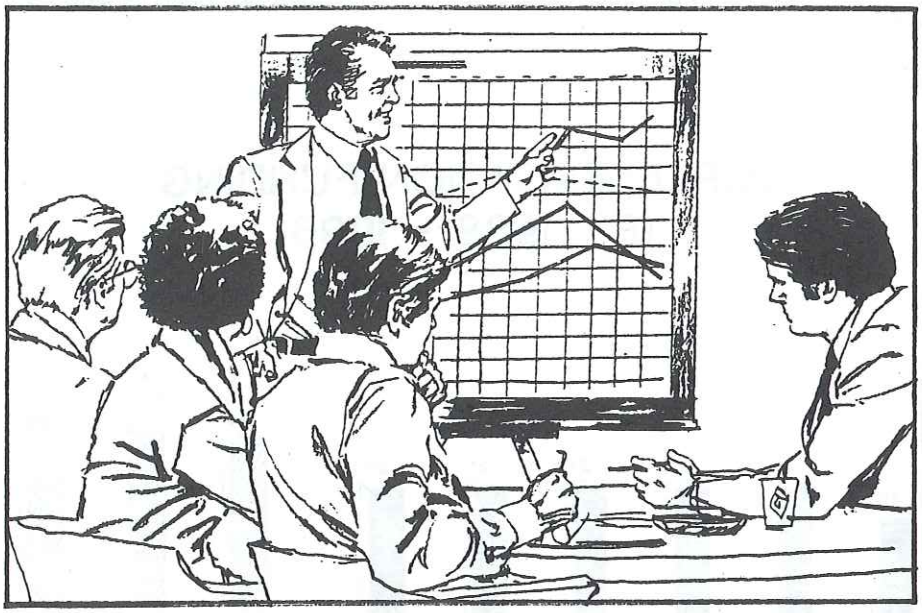
PERCENT OF TOTAL

Year	Plans Needing Modification (percent of total plans)	Bonds Needing Revision (percent of total plans)	Bonds Needing Release (percent of total plans)
1988	13	11	unknown
1989	6	15	7
1990	9	9	8
1991	7	15	3.5
1992	4	6	0
1993	20	54	23

On the Forest as a whole, some unnecessary disturbance to surface resources is occurring. The 1993 figures represent effects of a reduced workload, which allowed a higher quality of administration. The major obstacles to achieving full Forest Plan implementation appear to be the lack of adequate staffing and funding in minerals. The minerals program is mostly a reactionary program. It is difficult to accurately forecast activity levels for budgeting purposes. As such the program cannot adjust rapidly to large increases in plans. Currently we are experiencing a decrease in workload and so we are able to more accurately administer operations and review files.


©DG 1990

ECONOMICS



Item 3:	Cost of Implementing Resource Management Prescriptions
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annually
Variability Which 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.

The Forest's Outyear Program is reviewed and updated annually. The Outyear Program 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 at about past funding levels and estimates outputs at that funding level.

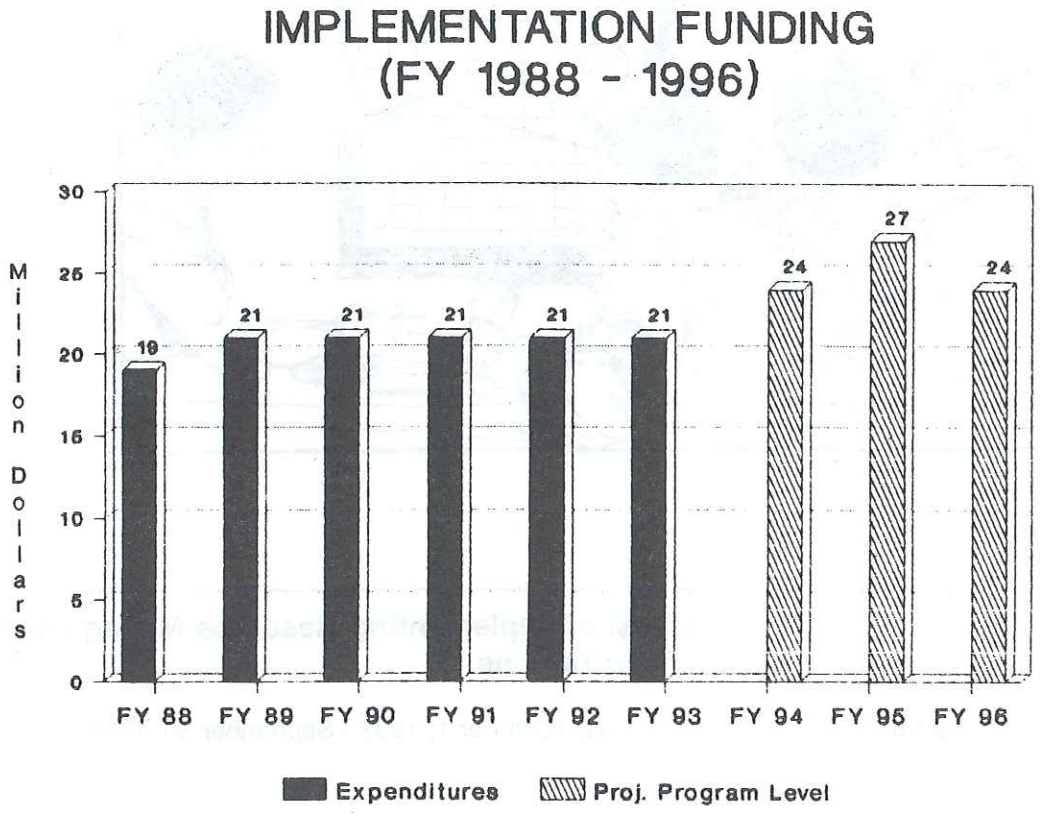
Monitoring Results

Table 3, found in the beginning of this report, displays, budget allocations, and actual expenditures for the fiscal years 1988, 1989, 1990, 1991, 1992, and 1993. Dollars have been adjusted to constant 1993 values.

Table 4 displays projected annual costs for outyears FY 1994 - 1996. Corresponding activities and outputs for the Forest Plan period are displayed in Tables 1 and 2.

Evaluation of Monitoring Results

Past monitoring has shown that funding levels received have consistently been less than Forest Plan funding levels. The Outyear Program shows that situation will likely 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 Forest Plan funding levels have not been attained and as shown in Table 2, may not be attained in the future.



The chart shown above shows funding levels expended by the Forest in the past six years and the projected funding level for the next three years. Dollars for all years have been adjusted to 1993 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, 1992 - September 30, 1993)
Reporting Period:	6 Years (FY 1993)
Variability Which 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.

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 nonmarket benefits were used in the Forest Plan to determine total priced 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

Revenues	Projected Annual Forest Plan Revenues (FY 93$)	Actual FY 1988 Revenues (FY 93$)	Actual FY 1989 Revenues (FY 93$)	Actual FY 1990 Revenues (FY 93$)	Actual FY 1991 Revenues (FY 93$)	Actual FY 1992 Revenues (FY 93$)	Actual FY 1993 Revenues (FY 93$)
Timber	$15,217,097	$5,397,486	$8,350,147	$7,543,434	$4,876,497	$8,115,689	$8,819,491
Range	$58,000[1]	$40,866	$43,789	$46,011	$39,251	$38,228	$38,245

[1]Projected grazing revenues have been held constant over time because grazing fees to not rise with inflation.

Timber Revenues

The differences between projected Forest Plan timber revenues and actual timber revenues are due to two factors. First, we are not experiencing stumpage values as high as predicted in the Forest Plan. Stumpage values used in developing the Forest Plan were approximately $218/MBF in constant FY 93 dollars. The experienced stumpage value for FY 1991-1992 was $153/MBF in constant FY 93 dollars. Second, timber harvest in fiscal years 1988 through 1993 was lower than the predicted average annual harvest displayed in the Forest Plan (Table 1).

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 (EIS) 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.

The revenue increase experienced in 1989 over 1988 can be attributed primarily to the increase in timber sale receipts. More timber was harvested in 1989, perhaps a function of more favorable market conditions.

The revenue decrease from 1990 to 1991 was a largely a result of different accounting methods used between 1990 and 1991. In particular, established Purchaser Credits for roads were used in 1990, while charged Purchaser Credits for roads were used in 1991. The method of depreciating roads also changed in 1991.

The revenue increase from 1992 to 1993 was due to the higher volume of timber harvested and an evening out of the accounting method used for Purchaser Credit Roads which was changed in the previous year.

The following table displays gains or losses from timber harvesting and related activities. In the past, Payments to States has been included in this analysis, but it has been determined that the Payment to States is not a legitimate cost to the timber program. Payments to States is shown in item 8: Effects of National Forest Management Lands, Resources, and Communities Adjacent to the Forest, of this report.

Gain or Loss of the Timber Program

	FY 1988 (FY 93$)	FY 1989 (FY 93$)	FY 1990 (FY 93$)	FY 1991 (FY 93$)	FY 1992 (FY 93$)	FY 1993 (FY 93$)
Gain/Loss Before Payments to States	351,514	1,631,042	746,452	-2,136,322	-228,226	980,602

Range Revenues

Differences 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.

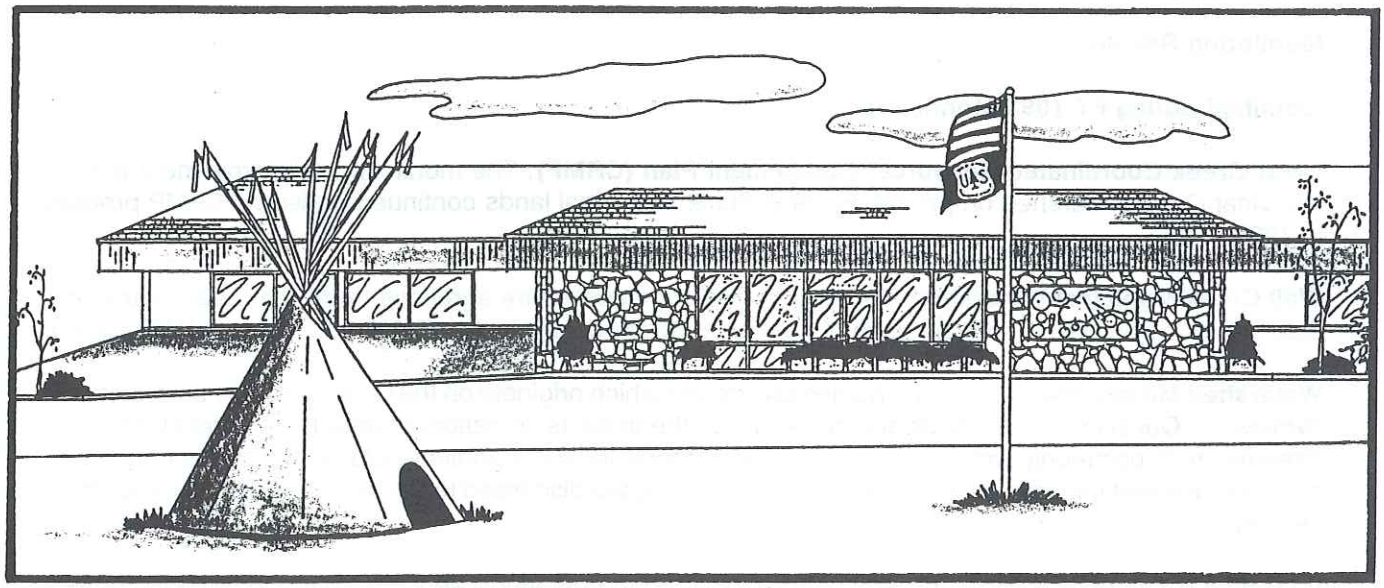
The range revenues in the Forest Plan were incorrectly calculated by multiplying the 1986/1987 grazing fee against the permitted Animal Unit Months (AUMs), instead of Authorized Head Months of use. Range revenues are correctly calculated by multiplying the current grazing fees against the Authorized Head Months of use. A "Head" is defined as a grazing animal 6 months or older.

In Fiscal Year 1993, grazing fees were $1.86 per head month for cattle and horses, and $0.37 for sheep. In 1993, 18,441 cattle and horse head months and 10,664 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 ADJACENT LANDS, RESOURCES, OTHER AGENCIES



Item 8:	Effects of National Forest Management on Lands, Resources, and Communities Adjacent to the Forest
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	Unacceptable effects determined by the Forest Interdisciplinary Team.

■·■·■·EFFECTS ON COMMUNITIES/RESOURCES/LANDS·■·■·■

Discussion:

The management direction in the Forest Plan is intended to provide a balanced consideration of Forest resources in meeting the present and future needs of society as well as those of future generations. It relies on the application of scientific knowledge, conservation leadership and wise stewardship, in partnership with other public agencies, tribal governments, communities, and others that are interested and affected by Forest management.

Six years of monitoring have provided the following results. Effects identified in past years' monitoring may or may not continue to affect our neighbors in 1993. Results that have been adopted as Action Items (see Appendix) are not repeated here from previous years' monitoring reports.

Monitoring Results:

Identified during FY 1993 Monitoring:

Clear Creek Coordinated Resource Management Plan (CRMP): The monitoring of improvement work in the Clear Creek watershed on private, Federal, State, and Tribal lands continued under the CRMP process in 1993.

Wall Creek Municipal Watershed Planning: A challenge cost share agreement with the Clearwater Water District was completed for the purpose of monitoring water quality in the Wall Creek Municipal Watershed.

Watershed Management: There are numerous streams which originate on the Forest and flow onto adjacent ownership. Questions are periodically raised about the impacts of national forest management on these streams, most commonly with reference to water temperature and sediment yield. Monitoring is ongoing to evaluate off-forest impacts. Some results of this monitoring are discussed under Item 2h in the Soil and Water section.

Post and Pole Industry: Two post and pole manufacturing operations were started up in fiscal year 1993. The Forest was able to provide sufficient posts and poles to support these two businesses.

Grazing Permittee: In fiscal year 1993 we informed a range permittee that his temporary permit will not be reissued for the fiscal year 1994 season. It does not appear that the permittee will be able to find, in the near future, another allotment on the Forest to graze his livestock.

Noxious Weed Management: The Forest reached agreement with the State Department of Transportation and Federal Highway Administration on the spraying of noxious weeds along Highway 14.

Wild and Scenic River: The Forest Service purchased a Wild and Scenic River easement on the Whitewater Ranch (117.2 acres) along the main Salmon River and purchased 23.9 acres of land within the Rapid River Wild and Scenic River corridor. The easement permits continued outfitting - guide operations, but prevents further subdivision of the property.

Pacific Yew Harvesting: There have been changes to the cooperative agreement between the Forest Service and Bristol Myer Squibb with respect to the harvest of yew bark from National Forest lands. This has had some effect on the local economy by shifting the available jobs that were temporarily created under the earlier harvest agreement from National Forest yew harvest to harvest from private lands. This has had some effect on the local economy.

Forest Service Payments to Idaho County from All Receipts: Idaho County receives a payment equal to 25 percent of total gross receipts. Gross receipts for FY 93 were $8,791,911.84. Timber receipts account for approximately 98 percent of the gross receipts.

Payments to Idaho County from Nez Perce NF (All Receipts)

Fiscal Year	Nominal Dollars	Constant 1993 Dollars
1993	2,197,978	2,197,978
1992	2,042,981	2,096,099
1991	1,303,797	1,375,506
1990	1,276,546	1,408,030
1989	1,243,278	1,428,526
1988	995,846	1,195,015
1987[1]	845,957	1,051,525
1986[1]	1,104,748	1,414,077
1985[1]	1,228,458	1,619,108
1984[1]	596,575	816,115
1983[1]	454,011	648,328
1982[1]	338,171	502,860
1981[1]	1,168,039	1,866,526
1980[1]	1,243,044	2,181,542

[1] Receipts received prior to implementation of the Forest Plan.

Evaluation of Monitoring Results:

The payment to Idaho County from all receipts from the Nez Perce National Forest in fiscal year 1993 was higher than any payment (in constant 1993 dollars) during the previous 14 years.

The Forest needs to work more closely with permittees to review activities that may affect their livestock management.

In the future the Forest will not be issuing temporary grazing permits.

The Forest's agreement with the State Department of Transportation and Federal Highway Administration on the spread of noxious weeds, should help reduce the spread of noxious weeds to federal and privately owned lands.

The purchase of Wild and Scenic River easements and land has increased federal control over what kinds of land uses are permitted in these areas.

■·■·■·EFFECTS OF OTHER GOVT. AGENCIES ON FOREST·■·■·■

Item 9:	Effects of Other Government Agencies' Activities on the National Forest
Frequency of Measurement:	Annually (October 1, 1992 - September 30, 1993)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	Unacceptable effects determined by the Forest Interdisciplinary Team.

Monitoring Results:

State of Montana and State of Idaho (Air Quality): The Forest joined the North Idaho Airshed Group in 1990. This group's objective is to minimize or prevent the accumulation of smoke in Idaho to meet State and Federal ambient air quality standards when prescribed burning is necessary. From time to time, the State of Montana and the State of Idaho have asked us to curtail our burning for air quality purposes, but this did not occur in 1993.

State of Idaho Department of Lands (IDL): Under our cooperative agreement with the State of Idaho Department of Lands, cooperation and exchange of firefighting resources is continuing. This has been beneficial to the Forest in fighting Forest fires.

The Forest invited the local Forest Practices Act Advisors to participate in ten project implementation monitoring reviews.

A land exchange between Bennett Lumber and the State of Idaho changed land status of areas within the Elk City township during fiscal year 1993. This has influenced the Forest in several ways. It changed the ownership along Forest boundaries from State to private, which has a direct effect on the Forest by changing the requirements for right-of-ways or travel easements along roads leading out of the township onto the Forest. There may also be other more indirect shifts in the nature of the cumulative relationship between activities on those lands and on National Forest System lands.

Three new Stream Segments of Concern were designated on the Forest in 1993 under the Idaho Antidegradation Program. They are Clear Creek and its Middle and South Forks. The IDL is in the process of forming a Local Working Committee to develop objectives and site-specific best management practices for timber activities in these watersheds.

Idaho Department of Health and Welfare (IDHW) Division of Environmental Quality (DEQ): The DEQ continued its lead role in a water quality monitoring project on Big and Little Elk Creeks. These are Stream Segments of Concern located in the Elk City area. DEQ personnel were also involved with implementation monitoring reviews.

Idaho Department of Water Resources (IDWR): Under provisions of the Stream Channel Alteration Act, the Forest consulted with the IDWR with respect to mining, road construction, and instream improvements. The Department is also involved in administering the Snake River Water Rights Adjudication. The Forest filed its claims under the adjudication in March 1993.

State of Idaho Outfitters and Guides Licensing Board: Through formal agreement, the Forest Service and the Board coordinate the permit and enforcement process for outfitters and guides providing public services on National Forest System lands.

Idaho Department of Fish and Game (IDFG): The Venture 20 project involving the IDFG, the Nez Perce Tribe, and the Forest began operating in FY 1992. Big game winter surveys conducted by the IDFG provided data for monitoring big game populations. The nongame division of the IDFG assisted in monitoring the Shingle Creek peregrine nest results in FY91. They provided funding, through Kelly Creek Flycasters, for the Mullens fisheries habitat improvement project. They also conducted a cost-shared

Forest survey for the flammulated owl and provided assistance to the Forest in monitoring and enforcing compliance with access restrictions. The Department has been a partner with us in development of the Selway fish pond and Watchable Wildlife project. They have also furnished money through Trout Unlimited and some of their people helped with a riparian fencing project.

Idaho State Historical 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. This 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.

Idaho Department of Parks and Recreation: Provided funds, equipment, and people to groom snowmobile trails. The Department is providing funding for construction of an off-highway vehicle trail system in the Silver-Cougar area and for rehabilitating the Fish Creek campground for handicap service and accessibility. These programs benefit the Forest and provide services the public needs.

State Parks has completed a comprehensive "Idaho Trails Plan." This Plan shows for the Nez Perce and Other Idaho forests, existing conditions, needs, and users demands for Idaho trails, including agency responsibilities and accomplishments.

Idaho State Board of Aeronautics: The Board periodically inspects Moose Creek and Shearer Airfields, and has been involved in the planning effort and proposals for the other airstrips.

Idaho Conservation Data Center (ICDC): The ICDC cooperated with the Forest in conducting presence/distribution surveys for three sensitive plants and one sensitive owl.

Idaho County: The County maintains the Salmon River, Dixie and Crooked River roads under cooperative agreements. Coordination of maintenance soil disposal by the County has resulted in a positive trend for sediment reduction.

The Forest continued to cooperate with the County on road maintenance on the Elk City District and in the Elk City township. One particular area of cooperation and improvement for this year is that the County acquired gravel on National Forest lands for use on roads in and around Elk City. This helps to improve the quality of life in the Elk City area as well as reducing road damage and potential for sedimentation in streams that flow from the township onto National Forest lands.

The County provides fiscal cooperation with snow mobile funding in support of the snowmobile grooming program as well as cooperates in the snowplowing services for local Park and Ski and snowmobile programs.

County provides cooperative maintenance services where shared responsibilities occur.

Idaho County Sheriff's Office (ICSO): The ICSO monitors Forest Service radios during non-official hours, provides assistance on patrols, security monitoring and arrests during an Earth First! protest. The two agencies also cooperate in search and rescue missions.

Nez Perce Tribe/Columbia River Inter-Tribal Fish Commission: The Nez Perce Indian Tribe, as in previous years, assisted the Forest in cultural awareness, recruitment and training activities. This assistance was of value in helping the Forest diversify its workforce and accomplish resource management objectives.

U.S. Army Corps of Engineers (COE): The COE was consulted on projects involving wetlands under provisions of Section 404 of the Clean Water Act. Agency personnel also participated in training sessions on implementation of Section 404 regulations.

The U.S. Army Corps of Engineers has a special use permit to operate a fish rearing facility on Crooked River. During fiscal year 1993 the COE made some improvements to the facility to provide a secure water supply for the facility. As part of the work, the Corps installed low-flow structures in Crooked River which help to retain useable fish habitat under a variety of flow conditions.

■·■·■·EFFECTS OF OTHER GOVT. AGENCIES ON FOREST·■·■·■

U.S. Fish and Wildlife Service (USFWS): Approximately one hundred biological evaluations were conducted for threatened and endangered, and sensitives species in FY 93. The USFWS provided input to much of the process.

Bureau of Land Management (BLM): The BLM and Nez Perce National Forest were involved in cooperative cadastral surveys. This was very beneficial to both agencies, with excellent results. An annual coordination meeting takes place. Activities coordinated include timber, range, mining, recreation, and water monitoring.

In fiscal year 1993 regulations administered by the BLM but that apply to mining on National Forest lands were changed to begin to charge fees for mining claims. The small miners exemption from such fees generated a flood of applications for exemptions to the Forest. This increased the minerals workload significantly during late fiscal year 1993.

Bonneville Power Administration (BPA): The Forest is working with BPA funds and several agencies and landowners to improve fish habitat, stream channel stability and riparian condition along several miles of Red River that's located on state and private lands.

National Marine Fisheries Service (NMFS): On May 22, 1992, the spring and summer run chinook salmon in the Salmon River drainage and the fall run chinook salmon in the Clearwater River were listed as "threatened" under the Endangered Species Act. That determination required a quick response by the Forest to meet consultation requirements with the National Marine Fisheries Service (NMFS), the agency responsible for coordinating salmon recovery.

In fiscal year 1993 the Forest finished the Forest-wide summary of project effects on the chinook salmon. Later in the year the Forest began to work on the cumulative effects assessment for major watersheds on the Forest. To accomplish this work has required a considerable shift in Forest work to address the salmon issue.

Evaluation of Monitoring Results:

As in previous years, in fiscal year 1993 the Forest benefited from cooperative agreements with other government agencies and the Nez Perce Indian Tribe. These agreements resulted in the establishment of closer working relationships, the sharing of technical support, project cost sharing, and better resource protection.

In order to meet the consultation requirements with NFMS, the Forest has reprogramed a major part of its work to enable biological evaluations to be made on projects and activities. The purpose of these evaluations are to determine the effects these projects and activities have on chinook salmon recovery.

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.

1. 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 persons. 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 participation 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 which 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 Resource Team identified the need to evaluate accessibility of Forest facilities to people with disabilities. In June of 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 regular District phone numbers, or (208) 983-2280 for the Headquarters office.

General Description of the Different Levels of Accessibility (Interim Draft, Design Guide for Accessible Outdoor Recreation).

Accessible	Challenge Level 1	Challenge Level 2
All facilities are accessible for most people with disabilities without assistance. Facilities meet Uniform Federal Accessibility Standards (UFAS).	Most facilities are useable with effort by the "average" person with a disability. Generally meets UFAS requirements.	Site and facilities are useable unaided by an athletic disabled person, or by an "average" disabled person with assistance.

Monitoring Results:

Accessibility by Challenge Level

Facility	Accessible	Challenge Level 1	Challenge Level 2
Fish Creek Pavilion	Not Accessible at this level (will be by end of FY 94)	Not Accessible at this level (will be by end of FY 94)	Accessible at this level
Fish Creek Campground	Not Accessible at this level (will be by end of FY 94)	Not Accessible at this level (will be by end of FY 94)	Accessible at this level
Castle Creek Campground	Not Accessible at this level	Not Accessible at this level	Accessible at this level
South Fork Campground	Not Accessible at this level	Not Accessible at this level	Accessible at this level
Race Creek Campground	Not Accessible at this level	Not Accessible at this level	Accessible at this level
Slims Camp Campground	Not Accessible at this level	Not Accessible at this level	Accessible at this level
Selway Falls Campground	Not Accessible at this level	Not Accessible at this level	Accessible at this level
O'Hara Bar Campground	Not Accessible at this level	Not Accessible at this level	Accessible at this level
Spring Bar Campground	Not Accessible at this level	Accessible at this level	Accessible at this level
Spring Bar Boat Ramp Parking Area	Not Accessible at this level	Accessible at this level	Accessible at this level
Allison Creek Picnic Area	Not Accessible at this level	Not Accessible at this level	Accessible at this level
Wildhorse Campground	Not Accessible at this level	Accessible at this level	Accessible at this level
Slate Creek Ranger District Office	Accessible at this level	Accessible at this level	Accessible at this level
Clearwater Ranger District Office	Accessible at this level	Accessible at this level	Accessible at this level

Facility	Accessible	Challenge Level 1	Challenge Level 2
Nez Perce Forest Headquarters Office	Accessible at this level	Accessible at this level	Accessible at this level
Red River Ranger District Office	Accessible at this level	Accessible at this level	Accessible at this level
Moose Creek Ranger District Office	Not Accessible at this level	Not Accessible at this level	Not Accessible at this level
Selway Ranger District Office	Not Accessible at this level	Not Accessible at this level	Not Accessible at this level
Elk City Ranger District Office	Not Accessible at this level	Not Accessible at this level	Not Accessible at this level

Evaluation of Monitoring Results:

Several Forest facilities have been reviewed to determine their accessibility to people with disabilities. Four of the facilities were found to be accessible at the Accessible and Challenge Level 1-2 levels. In many of the facilities, it was difficult for someone in a wheelchair to use the toilet facility.

The Nez Perce Forest has a number of recreation areas that have a great potential for service to people with disabilities. The activities director from one of the local nursing homes indicated that they would love to take some of their residents to the forest if they could be assured of having accessible campgrounds and picnic facilities. Projects are scheduled for FY 94 that should greatly increase accessibility at the Fish Creek campground and Fish Creek pavilion.

The Selway pond project is designed to provide fishing access for the disabled, and will be open in May, 1994.

By the end of 1994, all facilities on the Nez Perce will be surveyed and transition plans developed. Each FS office will maintain copies of the transition plans that apply to their area. These transition plans will provide recommendations to the Forest on how to make the facilities reviewed, accessible to people with disabilities.

2. Environmental Analysis Accomplishments Related to Timber

Monitoring Results:

Following is the Forest Supervisor-authority environmental analysis accomplishment since the Forest Plan went into effect.

Fiscal Year	No. of Decisions	Included No. of Sales	Total Acres Analyzed	Proposed Harvest Acres	Percentage of Analysis Acres Actually Proposed for Harvest	Proposed Harvest Volume (MM)[1]
88	3	3	24,400	1,662	6.8	27.0
89	8	15	164,480	5,908	3.6	102.1
90	2	7	38,296	4,677	12.2	42.1
91	3	11	81,964	6,164	7.5	88.5
92	1	1	4,034	351	8.7	10.4
93	4	5	25,716	2,461	10.0	20.5
6-Yr.Avg.	3.5	6.8	64,815	3,537	5.5	48.5
Total	21	41	388,890	21,223	--	291

[1] Proposed harvest volume figures in this table are different than those exhibited in Table 1 on pages 5 and 9 because of the rounding off of numbers.

The five new timber sales approved in FY93 were Scott Fire Salvage, Selway Salvage, Quartz Relief, Crooked River, and French Gulch/Blue Ribbon. The decisions regarding the last three timber sales, mentioned above, were documented in decision memos.

As of the end of fiscal year 1993 (6 years since the Forest Plan went into effect), the Forest had completed site-specific analysis of 43 percent of the total suitable land base of 911,669 acres. Of the 21 total decisions, 3 were Environmental Impact Statements, 16 were Environmental Assessments, and 2 were Categorical Exclusions.

Evaluation of Monitoring Results:

Many National Environmental Policy Act (NEPA) documents require more than 1 year to complete. This results in high variability from year to year with respect to the number of decisions and acres analyzed.

Although 43 percent of the suitable acres were analyzed, only 27 percent of decadal allowable sale quantity (ASQ) was proposed for harvest on those same acres. Unless this volume shortfall can be made up on other acres (which is not likely), the Forest will fall short of decadal ASQ.

III. 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.

1. The Elk Guidelines Habitat Suitability Index (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 HSI Model so variables characteristic of Northern Idaho will be more properly represented and the model better tailored to local conditions.

   Status: To date, the Clearwater National Forest has taken the lead in generating a proposed method for validating the North Idaho Summer Elk Model. The method, developed with the cooperation of the University of Idaho, the Nez Perce Tribe, and the Idaho Department of Fish and Game, uses elk pellet transect data. Budget limitations currently prevent the implementation of the method on the Forest.

2. Moose winter range questions need to be addressed:

   a. What silvicultural system best maintains the yew component in the grand fir/Pacific yew association?

   b. How can fuels be managed and still retain Pacific yew?

   c. What is the optimum spatial arrangement of yew throughout the Forest?

   d. What is the optimum stand size for yew?

   e. How many acres of the grand fir/Pacific yew association exist on the Forest?

   f. Does the Forest Plan adequately address the definition and protection of key moose winter habitat which has no Pacific yew component?

3. The consequences of repeated burning, and of maintenance of forest ecosystems in prolonged seral brush stages, need to be evaluated.

4. Determine the relative effectiveness of fertilization compared to burning for improving wildlife habitat.

5. Determine and define corridor attributes needed to link old-growth stands.

6. The type of riparian conditions to manage for needs to be determined. Stand dynamics for riparian habitat types 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. Methods need to be developed to monitor the effects of timber harvest and other activities on riparian areas.

7. Habitat relationships and limiting factors for most sensitive species (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 of Research Needs:

Repeated Burning: In 1993, an evaluation of the results of repeated prescribed fire on big game winter range was initiated. Although the field work was completed in 1991, the published results from the evaluation related only the favorable responses of elk and deer to improved winter forage conditions. Data collected on soil and vegetative response to prescribed fire is yet to be analyzed and the results published. Lack of available funding and staff time has precluded completion of this evaluation.

IV. PLAN AMENDMENTS

Amending the Nez Perce National Forest Plan is a normal process of improving our ability to care for the land, and amendments to the Plan are anticipated. Sixteen amendments and one revised amendment have been issued and several others have been proposed. They are listed in the "Proposed Amendments" section of this report.

Following are summaries of those amendments made to date. A copy of any amendment(s) can be obtained by contacting the Nez Perce National Forest 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 Forestwide 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).

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 an appeal of Amendment #1.

> "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.

Amendment #3: Modifies standards listed in Chapter II (Forestwide 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 and 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 the appellant's concerns and a proposal for correcting the Plan.

Amendment #4: Modifies standards listed in Chapter II (Forestwide 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.

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.

Amendment #6: Corrects errors in Forest Plan Chapter II (Forestwide 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 environment 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.

Amendment #7: Clarifies language found in the following sections:

Chapter II (Forestwide 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.

Amendment #8: The purpose of 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 and 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.

Amendments #9 and #10: These amendments deal with management practices specific to the Cove and Mallard Timber Sales as described in the recently released 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 clearcutting and sanitation/salvage harvesting within Management Areas 12 and 17.

Amendment #11: Forest Plan Amendment No. 11 makes adjustments in the Forestwide monitoring program and updates the fish/water quality objectives in Appendix A to the Plan. The changes in the monitoring program were recommended by the Forest Interdisciplinary Monitoring Team in the Nez Perce National Forest Monitoring and Evaluation Report 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.

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.

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.

Amendment #14: Amendment 14 has been voided, as directed by the Washington Office of the Forest Service. This amendment dealt with separately showing the allowable sale quantity (ASQ) that came from inventoried roadless areas and roaded areas.

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.

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.

V. LIST OF PREPARERS

The following individuals contributed to the development of the Monitoring and Evaluation Report for the Nez Perce National Forest for fiscal year 1993. Members of the Forest Interdisciplinary Monitoring Team are designated with an asterisk (*).

UNIT	NAME	AREA OF EXPERTISE
Supervisor's Office	Nick Gerhardt *	Watershed
	Dick Artley*	Timber
	Dave Hayes*	Timber
	Leonard Lake*	Range
	Roger Ward *	Silviculture
	Nancy Rusho *	Minerals
	Dave Green *	Implementation Analysis and Economics
	MaryAlice Stoner*	Recreation/Wilderness/Rivers
	Ali Abusaidi*	Cultural Resources
	Ollie Goldammer*	Fire
	Pat Green *	Soils/Ecology
	Gary Kellogg *	Land Management Planning and Forest Interdisciplinary Monitoring Team Leader
	Steve Blair*	Wildlife
	Scott Russell*	Fisheries
	Kathy Moynan	Fisheries
	Joe Bonn*	Engineering
	Laura Smith	Graphics Illustrator
	Monica McGee	Technical Support
	Pete Parsell	Technical Support
Salmon River Ranger District	Mike McGee*	Salmon River District Monitoring Coordinator
Clearwater Ranger District	Sue Paradiso *	Clearwater District Monitoring Coordinator
Red River Ranger District	Rondi Fischer*	Red River District Monitoring Coordinator
Moose Creek Ranger District	Mark Woods *	Moose Creek District Monitoring Coordinator
Selway Ranger District	Jerry Bird *	Selway District Monitoring Coordinator
	Heather Berg	Selway District Planner

Elk City Ranger District	Paula Guenther-Gloss*	Elk City District Monitoring Coordinator

In addition, the report was reviewed by the following individuals:

Michael King	Forest Supervisor
Ihor Mereszczak	Timber, Range, and Minerals Staff Officer
Michael Cook	Forest Engineer, Contracting, Purchasing, and Communications Staff Officer
David Poncin	Recreation, Wilderness, Fire, and Lands Staff Officer
Jan Robinson	Personnel Staff Officer
Elayne Murphy	Customer Service Information Staff Officer
Phil Jahn	Fisheries, Wildlife, Watershed, and Soils Staff Officer
Jerry Bird	Acting District Ranger, Salmon River Ranger District
Mark Peterson	Acting District Ranger, Clearwater Ranger District
Ed Wood	District Ranger, Red River Ranger District
Dennis Dailey	District Ranger, Moose Creek Ranger District
Cynthia Lane	District Ranger, Selway Ranger District
Jim Wiebush	District Ranger, Elk City Ranger District

VI. APPROVAL

I have reviewed the annual Forest Plan Monitoring and Evaluation Report for Fiscal Year 1993 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:

Michael King

MICHAEL KING
Forest Supervisor

6/14/94
Date

APPENDIX

ACTION ITEMS

Action items are concerns that were identified during Fiscal Year 1993 monitoring that need to be acted upon. Action to resolve these concerns will be taken in 1994.

Item 1: Forest needs to determine how fire or silvicultural prescriptions might be used to protect designated old growth from stand-replacing fires (page 29).

Item 2: Concise snag identification and marking directions to Forest Service timber marking crews must be included in timber marking guidelines. Consistent non-contradictory timber sale contract clauses are needed to help retain snags and trees for replacement snags (page 30).

Item 3: The Forest needs to continue to discuss with the Nez Perce Tribe alternatives to prescribed fire in achieving big game winter range improvements (page 34).

Item 4: Fisher/pine martin transects need to have consistent annual readings to produce more useful data (page 38).

Item 5: More funds and staff time needs to be made available to adequately determine goshawk population trends (page 39).

Item 6: Monitoring of fish habitat condition needs to be adequately funded, staffed and given a higher priority for accomplishment (page 47-48).

Item 7: 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 (page 72).

Item 8: Mining operations in riparian areas need a consistent approach to 1) describing the premining attributes of soil, water, vegetation, and site that contribute to an individual wetland or streamside zone, 2) describe the proposed activity and how it will affect the different components of the riparian area and 3) developing a restoration strategy designed to move the system back toward predisturbance function (page 80).

STATUS OF ACTION ITEMS IDENTIFIED IN FY 1992 MONITORING & EVALUATION REPORT

The following action items were identified during FY 1992 monitoring. Following is the status of action taken on these items.

Action Item	Status or Action Taken
Item 1: The Nez Perce Tribe and Forest need to work together on exploring, evaluating, and recommending alternative ways (if any) of achieving big game winter range improvement.	The Forest had a meeting (in FY94) with the Tribe to resolve this issue. The Tribe is willing to look at the possibility of counting wildfire burn acres on winter range to see if these burns are producing the necessary big game forage.
Item 2: Soil impacts due to repeated prescribe burning need to be evaluated against the natural range of variability of soil properties operating in natural fire regimes.	Studies have shown that soil nitrogen and organic matter declined in proportion to the date of the burn. Whether this is acceptable will depend on what is occurring under natural fire situations.
Item 3: Consistently determined suitability assignments need to be recorded in the timber stand data base, to provide better information for the 5 year review, to get a better estimate of acres available for treatment and timber yields.	The Forest has not been consistently making suitability calls regarding Forest Plan suitability assignements. In order to do this we need adequate criteria to set suitability standards.
Item 4: Timber stand inventory systems need to be adapted to the linear nature of riparian forest stands.	No action has occurred on this action item. The Forest needs to review this action item to determine if it is still appropriate.
Item 5: We need to develop a local extension to the TMSTAND data base to allow the recording of small areas of Management Area 10 (riparian areas).	No action has occurred on this action item. The Forest needs to review this action item to determine if it is still appropriate.

STATUS OF ACTION ITEMS IDENTIFIED IN FY 1991 MONITORING & EVALUATION REPORT

The following action items were identified during FY 1991 monitoring. Following is the status of action taken on these items.

Action Item	Status or Action Taken
Item 1: Continue to work on action items that have been identified in previous Forest Annual Monitoring and Evaluation Reports that have not been resolved.	Forest Plan changes are being considered to address the need to update the fish/water quality objectives (Appendix A) to reflect current knowledge for watersheds.
Item 2: Develop a recordkeeping system to track the percent of riparian acres, both suitable and unsuitable, by stand.	This has been accomplished.
Item 3: Emphasize the need to adapt existing contracts to achieve current riparian objectives.	During 1992, over 400 projects that are under contract, permit, or being implemented, were evaluated to determine their effects on chinook salmon recovery. In FY 93 there was no need for this type of work.
Item 4: Re-establish a concentrated effort to update the R1/R4 Guide (sediment yield monitoring).	The Northern Region released the WATSED model, which includes minor enhancements to the R1/R4 Guide. Intermountain Research Station is continuing data collection and analysis efforts which will be helpful in future revisions of the Guide.
Item 5: Validate the sediment, fishery, and elk models.	Wildlife: The Venture 20 project has assigned a technical team to standardize the model use and define input values for the model. The model will also be evaluated to determine if changes or modifications need to be made to update its use. Fishery: Kathi Moynan has been hired to incorporate fisheries management into ecosystem management. Sediment: The Forest completed a preliminary test of NEZSED, comparing measured versus modeled sediment yields in 1991. Results of this study were reported in the FY 1991 Monitoring Report and, in more detail, in the Hydrological Data Summary and Monitoring Results Analysis for Water Year 1991. Further validation of NEZSED utilizing the remaining Forest data is ongoing through a University of Idaho Master's Thesis project. The thesis work is scheduled for completion in December 1994.

Action Item	Status or Action Taken
Item 6: Develop criteria for evaluating impacts of off-highway vehicle (OHV) use. Determine what is unacceptable change on a transportation system or land base as the result of these uses and user types. "ORV" or "OHV" describe vehicle types such as motorcycles, minibikes, trailbikes, snowmobiles, dunebuggies, all terrain vehicles (ATV) and 4-wheel drive, high clearance vehicles.	No action was taken on this item in FY 1992.
Item 7: Develop a Management Area to address management goals, resource potentials, and limitations for "grand fir mosaic" areas.	The Forest Interdisciplinary Monitoring Team, after further review of this issue, recommended that Management Areas not change unless such changes are unavoidable. The whole subject should be re-opened at the scheduled revision.
Item 8: In regard to Pacific yew management, the Forest needs to: - Amend the Plan with a new definition of MA 21 and new management direction for MA 21 which reflects current knowledge about the winter habitat needs of moose. - Complete a Forest yew inventory that will be adequate to identify the suitability of inventoried areas for moose winter range and the need of moose for those areas as winter range. - Identify the 52,798 acres of MA 21 allocated by the Forest Plan using the completed inventory and the distribution needs of moose. - Amend the Plan to incorporate the National Yew Conservation Guidelines.	Amending the Forest Plan with a new definition and management direction for MA 21 was not accomplished in FY 93. The 5-year review of the Plan will lead to a determination on whether or not this will be done. Inventory 75 percent complete (100,000 acres of 136,000 acres). Review of the yew inventory was not conducted in FY 93. Biologists will use the inventory to help assign the allocated acreages. A National EIS was approved in September 1993 that accomplished this.
Item 9: Look into the possibility of providing information on our firewood permits to help retain wildlife snags.	No action has been taken to date.
Item 10: Review the appropriateness of adding a monitoring element to the Forest Plan addressing the Forest situation regarding commodity vs. non-commodity vegetation.	The review of the appropriateness of adding this monitoring item to the Forest Plan has not yet occurred.

STATUS OF ACTION ITEMS IDENTIFIED IN FY 1990 MONITORING & EVALUATION REPORT

The following action items were identified during FY 1990 monitoring. Following is the status of action taken on these items.

Action Item	Status or Action Taken
Item 1: The Coordinated Resource Management Plan (CRMP) process and its successes need to be highlighted. CRMP is a planning process administered by the Soil Conservation Service. It facilitates communication and cooperation between agencies and landowners. Agencies, groups, and people need to be recognized for their CRMP work. The Forest needs to explore increasing awareness and use of the CRMP process.	The CRM process has been recommended for two additional watersheds on the Forest. The Elk City Antidegradation Local Working Committee endorsed CRM as a way to consider comprehensive watershed management needs in the American River basin. To date, no formal action has been taken to form a CRM committee. The Red River Ranger District is exploring formation of a CRM committee in the Red River basin to address watershed management needs. The Clear Creek CRM group has remained active and reached out to the local community through efforts with the Idaho Wildlife Council and the Valley Elementary School in Kooskia.
Item 2: Fishery/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 fishery/water quality objective.	No action has been taken to amend the Forest Plan to reflect these changes. This amendment is planned to be submitted by the Clearwater Ranger District in 1992.
Item 3: The Forest Service and the Idaho Department of Fish and Game should attempt to cooperatively develop a joint strategy to address the emerging bull elk vulnerability issue.	The Nez Perce Forest Access Management program provides opportunities to address the bull elk vulnerability program. Access decisions are the Forest's primary contribution toward resolving bull vulnerability issues. In concert with the Forest's efforts, the Idaho Department of Fish and Game is making adjustments in hunting season dates, seasons, and is currently working to develop a bull vulnerability model to assess impacts.

Action Item	Status or Action Taken
Item 4: Riparian area action that needs to be addressed: - Amend the Forest Plan and incorporate into Management Area 10 all the riparian area direction that occurs throughout the Forest Plan. Included in that direction should be the consideration of MA 10 as connecting corridors between old-growth stands. Also included would be appropriate portions of the "Guide to Timber Management in Riparian Areas."	
- The Forest needs to complete a preliminary version of the riparian classification system and see how it corresponds to the "Guide to Timber Management in Riparian Areas."	The Forest accomplished additional sampling in 1991, but data are not yet adequate to draft a version that would address all Forest stream types. A draft write-up is planned for FY 92 that would include preliminary descriptions of those types that have been sampled.
-- The "Guide to Timber Management in Riparian Areas" needs to be brought up to date and, after interdisciplinary review, formally adopted.	The Forest has decided to not complete the "Guide to Timber Management in Riparian Areas" in its present format. Interdisciplinary review has indicated the need for an intermediate, more concise statement that clarifies Forest Plan intent with respect to implementing riparian area standards and guidelines. A draft policy statement has been developed that defines riparian areas, reiterates Forest Plan standards, and proposes a process of inventory, analysis, and environmental documentation necessary before management activities in riparian areas may be undertaken. This draft document is currently undergoing Forestwide review. Parts of the "Guide to Timber Management" may be used as interim guidance, and later as appropriate to meet the requirements of the proposed policy statement. A new group will be formed in 1992 to address the question of guidance for management of riparian areas.
Item 5: The Forest needs to develop direction on Pacific yew. Specifically, the following areas need to be addressed: - How should increasing requests for bark collection permits be handled.	The Forest yew program was actively coordinated with the national effort. National policies and standards for permitting, utilization, transporting, and accountability were implemented.

Action Item	Status or Action Taken
- Determine what kind of Pacific yew stands and stand structure is important as moose habitat.	Two meetings were held (4/4/91, 10/31/91) with invitees from Idaho Department of Fish and Game, Nez Perce Tribe, and the University of Idaho, as well as biologists, foresters, and silviculturists from the Forest in an attempt to identify this information considering the rising demand for yew bark. Some basic recommendations were gathered from the participants on sites and methods to employ in the harvest; however, lack of additional scientific information and monitoring of post-treatment sites was very limited. In 1992, an Environmental Analysis was completed for the harvest of Pacific yew on three Districts of the Forest. Moose use within harvest areas will be monitored.
- Amend MA 21 and clarify objectives.	The Forest Wildlife Biologist completed a comprehensive summary of the existing research along with feedback gathered from the 4/91 and 10/91 meetings. A proposed definition and revised objectives were developed, which will undergo review by interested groups and other resource specialists. Deferred in 1992 while the yew inventory was being completed. This will become a part of the 5-year review.
Item 6: The Forest should continue its comprehensive inventory of the Pacific yew stands/structures that are determined to be important as moose habitat.	Draft guidelines for stratifying the relative value of MA21 stands based on available information and professional judgment were provided to the Pacific yew coordinator for the planned yew inventory contract in FY 92. 135,000 acres of yew lands were identified as having high potential for suitability for either MA21 or Pacific yew bark harvest. A Pacific yew inventory was designed, and field work completed on 99,000 acres. A computer database to store the information was established. Data was used to model harvest alternatives for the Draft Pacific Yew EIS. Data is available for future use in the EIS, MA21, bark harvest, or other analyses.
Item 7: Travel management needs to be better coordinated Forestwide.	In 1991, the Nez Perce combined visitor/travel map was revised in a totally new format. Displays of access management information, including legends, were simplified and formatted to be more user friendly and understandable. A companion document listing all roads on the Forest and their regulations was started, but not completed. It should be completed in 1992. The mapping exercise and road listing, along with implementation of the Access Management Guide, are a start toward Forestwide consistency in access management, but there is still considerable variability among Ranger Districts in access management implementation.

Action Item	Status or Action Taken
Item 8: We need to improve our efforts to give verification of quality, amount, and distribution of snags during project planning.	Efforts to increase Forest employees' awareness of and emphasis upon verification of snag qualities, amounts, and distribution include distribution to all District Wildlife Biologists, "How to Determine Snag Density" by E.L. Bull, R.S. Holthausen, and D.B. Marx. In 1989, a Forestwide Snag Workshop was held to identify barriers to retaining and managing for adequate snag numbers and practical solutions to the problem. Forestwide recognition of the issue and efforts to improve performance have since included proposals to create snags with K-V funding where existing densities are insufficient to meet standards.
Item 9: Timber stand inventory systems need to be adapted to the linear nature of riparian forest stands. The record keeping system should be adapted to allow grouping plots between stands into riparian substands, as well as keeping track of riparian acres within a stand.	
Item 10: Through further development and implementation of the Access Management Plan, the Forest needs to develop a systematic method to monitor off-road vehicle use and impacts.	No systematic method of monitoring off-road vehicle use and impacts was developed.
Item 11: The Forest needs a review and revision of Recreation Opportunity Spectrum (ROS) maps Forestwide, incorporation of ROS into all environmental analyses, and a mechanism for updating ROS acreage changes in a data base. All of these will be necessary in order to adequately monitor ROS after a 5-year period.	ROS considerations were incorporated into most environmental analyses. The Forestwide review, revision, and mechanism for updating ROS acreage changes were not done.
Item 12: The Forest needs to improve its control of water quality impacts from water quality and fish habitat improvement projects.	No definitive action was taken on this item. Forest personnel have been encouraged to minimize the temporary impacts of fish habitat improvement projects on sediment production through application of mitigation measures.
Item 13: The Forest will encourage the Region to reconvene the Northern and Intermountain Region (R-1/R-4) technical task force to revise the 1981 Sediment Yield Guidelines, incorporating new information.	The Forest continues to lobby for reconvening of the task force to update the R1/R4 Guide. Some efforts have been undertaken through implementation of the Region's WATSED computer program.
Item 14: The Forest has several years of sediment yield data from six gaged monitoring stations. These data should be evaluated to assist in validation of the sediment yield model.	Partial analysis was completed on five of eight gaged stations on the Forest, comparing measured and modeled sediment yields. The results of this analysis will be presented at the Idaho Nonpoint Source Monitoring Results Workshop in January 1992.

Action Item	Status or Action Taken
Item 15: The Forest needs to place more emphasis on inventorying sensitive plants and biological evaluations.	In FY 91, additional energies were focused on plant identification training for field-going crews and cooperative assistance from botanists of the Idaho Conservation Data Center were implemented. Increased awareness and completion of biological evaluations resulted in newly discovered locations of candystick, Payson's milkvetch, broad-fruit mariposa lily, Idaho douglasia, and evergreen kittentail. Planned harvesting on one timber sale was revised to reflect appropriate protections for candystick.
Item 16: The Forest Plan identifies a segment of White Bird Creek as an eligible waterway for the Wild and Scenic River system. None of this eligible waterway is on Forest Service land. We need to review whether the Forest Service or some other agency should take the lead in conducting a suitability study of the eligible segment of White Bird Creek.	Staff work has been completed on this action item. The Forest will be proposing that the State of Idaho or the National Park Service take the lead role in conducting the study. The Forest Service has no authority to conduct a Wild & Scenic River suitability study on lands where the eligible waterway is entirely outside the Forest boundary.

STATUS OF ACTION ITEMS IDENTIFIED IN FY 1989 MONITORING & EVALUATION REPORT

The following action items were identified during FY 1989 monitoring. Following is the status of action taken on these items.

Action Item	Status or Action Taken
Item 1: For practices that don't meet the Idaho Forest Practices Act, how do we ensure that we get a variance?	The Regional Forester provided direction to Idaho Forests on variance procedures in the Idaho Forest Practices Act in March 1990. This was done in FY 1991.
Item 2: What constitutes an opening for vegetative management purposes?	Clarification on definition of opening was sent to the Districts. This clarification referenced the "Northern Regional Guide"'s ROD of June 10, 1983, Sections 2-5A through 2-6A. The bottom line said that the definition of an opening is dependent on the management area objectives in the Forest Plans. An opening in areas with emphasis on big game summer range may have different vegetative characteristics than areas with visual emphasis or strictly timber emphasis. High emphasis MA-16 might require big game hiding cover before it is considered a "non-opening," while certified regeneration may constitute a non-opening where big game summer range is not a strong consider-ation.
Item 3: Application of the sediment model as it relates to reconstruction and future reduction of sediment yield needs to be clarified.	The requested guidance has been issued in draft form in the "Care and Feeding of Appendix A - An Implementation Guide to the Fish/Water Quality Objectives in the Nez Perce National Forest Plan."

Action Item	Status or Action Taken
Item 4: Re-examine assignments of elk summer habitat objectives (see FP, page II-18, item 6) to ensure manageable habitat units are delineated that can be coordinated with timber harvest, access management, and livestock use. Current assignments in some areas are fragmented and effects of proposed activities cannot be modeled using the "Guidelines for Evaluating & Managing Summer Elk Habitat in North Idaho." Establish procedures for examining manageability during project planning and involvement of the Idaho Department of Fish and Game, the Nez Perce Tribe, and other affected parties.	Forest Biologists Steve Blair and Kim Mitchell made a presentation at the February Leadership Team meeting, discussing the need to make adjustments in the EAU boundaries and to analyze the existing condition Forest-wide. On June 27, the Forest Supervisor sent a letter to the District Rangers requesting that each District estimate the funding needed to complete the work. Enclosed with the letter was a "stepwise approach" developed by Steve Blair, outlining how best to proceed with the work. On August 14, a meeting with the Nez Perce Tribe and the Idaho Department of Fish and Game was held to discuss the need and recommended process for re-delineation of the Forest's elk objective boundaries. This meeting resulted in agreement on a general process that would be followed by each District, and is documented in an August 20 letter to District Rangers from the Forest Supervisor. Based on this finalized process, each District was asked to update their estimate of time and costs necessary in FY 91 to complete the task. The work is ongoing by the Forest and District biologists.
Item 5: The Forest Plan decade for modeling sediment yield and entry frequencies began in FY 88 (10/87). Project analyses will consider activities in the decade prior to the Forest Plan to determine the effect of past actions/activities on proposed projects.	This is Forest direction. The requested guidance has been issued in draft form in the "Care and Feeding of Appendix A - An Implementation Guide to the Fish/Water Quality Objectives in the Nez Perce National Forest Plan."
Item 6: How do we modify the Timber Stand Management Record System (TSMRS) to track small inclusions of management areas such as riparian areas?	This item is still on the agenda. Forest planning personnel will be developing a table in 1992 that will track percent of riparian acres, suitable and unsuitable, by stand.

Action Item	Status or Action Taken
Item 7: Concern that monitoring cost will continue to increase as public concern over the accuracy of the Forest Plan outputs increase. As monitoring costs rise, the burden of funding the cost from District project funds will become more difficult. Recommend that Forest management codes be created and that all monitoring activities be charged as worked.	No Forestwide direction has been provided to date. Forest units have the ability to create project management codes for tracking these costs.
Item 8: How should managers consider the effect of water yield increases in small drainages?	Guidance for this concern is provided on a case-by-case basis. No Forestwide guidelines have been issued.
Item 9: How is the Forest going to accomplish range management plan updates?	A schedule based upon priorities has been developed for accomplishing range management plan updates.
Item 10: How can the Forest develop a systematic method for monitoring ORV use?	The Forest did not develop a systematic method for monitoring ORV use in 1990. We will continue to work on this in 1991.
Item 11: How to apply the water quality guidelines in Appendix A of the Forest Plan to mineral activities?	The requested guidance has been issued in draft form in the "Care and Feeding of Appendix A - An Implementation Guide to the Fish/Water Quality Objectives in the Nez Perce National Forest Plan."

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:

- Thompson, K. 1990. Utilization of Instream Habitat Improvement Structures for Summer Rearing by Juvenile Hatchery and Wild Steelhead Trout in an Idaho Stream. M.S. Thesis, Humboldt State University.

- Burroughs Jr., Edward E., John G. King. 1989. Reduction of Soil Erosion on Forest Roads. U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station, General Technical Report INT-264.

- Nez Perce National Forest. 1988. Effectiveness of Mitigation Practices and Specific Measures Associated with Facilities Proposed for Wing Creek-Twentymile EIS.

- State of Idaho, Idaho Department of Lands. 1990. Rules and Regulations Pertaining to the Idaho Forest Practices Act, Title 38, Chapter 13, Idaho Code.

- Idaho Department of Fish and Game. 1984. Guidelines for Evaluating and Managing Summer Elk Habitat in Northern Idaho. Wildlife Bulletin No. 11.

- Nez Perce National Forest. 1988. Nez Perce Access Management Guide.

- U.S. Congress. 1977. Clean Water Act of 1977.

- U.S. Congress. 1968. The Architectural Barriers Act of August 12, 1968.

- U.S. Congress. 1973. Rehabilitation Act of 1973.

- U.S. Congress. 1990. Americans with Disabilities Act of 1990.

- U.S. Congress. 1966. National Historic Preservation Act of 1966.

- U.S. Congress. 1969. National Environmental Policy Act (NEPA).

- USDA, Forest Service, Nez Perce National Forest. 1989. Access Management Guidelines.

- USDA, Forest Service, Nez Perce National Forest. 1978. Fire Management Plan Selway-Bitterroot.

- USDA, Forest Service, Nez Perce National Forest. 1987. Fire Management Plan Gospel-Hump.

- USDA, Forest Service, Intermountain Region, Northern Region. 1990. Fire Management Plan Frank Church-River of No Return Wilderness.

- USDA, Forest Service. 1992. Selway-Bitterroot Wilderness, 1991 State of the Wilderness Report.

- USDA, Forest Service, Nez Perce National Forest. 1992. Nez Perce National Forest Hydrologic Data Summary and Monitoring Analysis, Water Year 1991 (in preparation).

- State of Idaho, Idaho Department of Health and Welfare, Division of Environmental Quality. 1988. Clear Creek Coordinated Resource Management Plan.

- State of Idaho, Water Quality Advisory Working Committee. 1990. Antidegradation Policy.

- King, John G. 1989. Streamflow Responses to Road Building and Harvesting: A Comparison With The Equivalent Clearcut Area Procedure. USDA, Forest Service, Intermountain Forest and Range Experiment Station, Research Paper INT-401.

- USDA, Forest Service, Northern Region and Intermountain Region. 1981. Guide for Predicting Sediment Yields from Forested Watersheds.

- State of Idaho, Idaho Department of Health and Welfare, Division of Environmental Quality. 1992. Idaho Water Quality Standards.