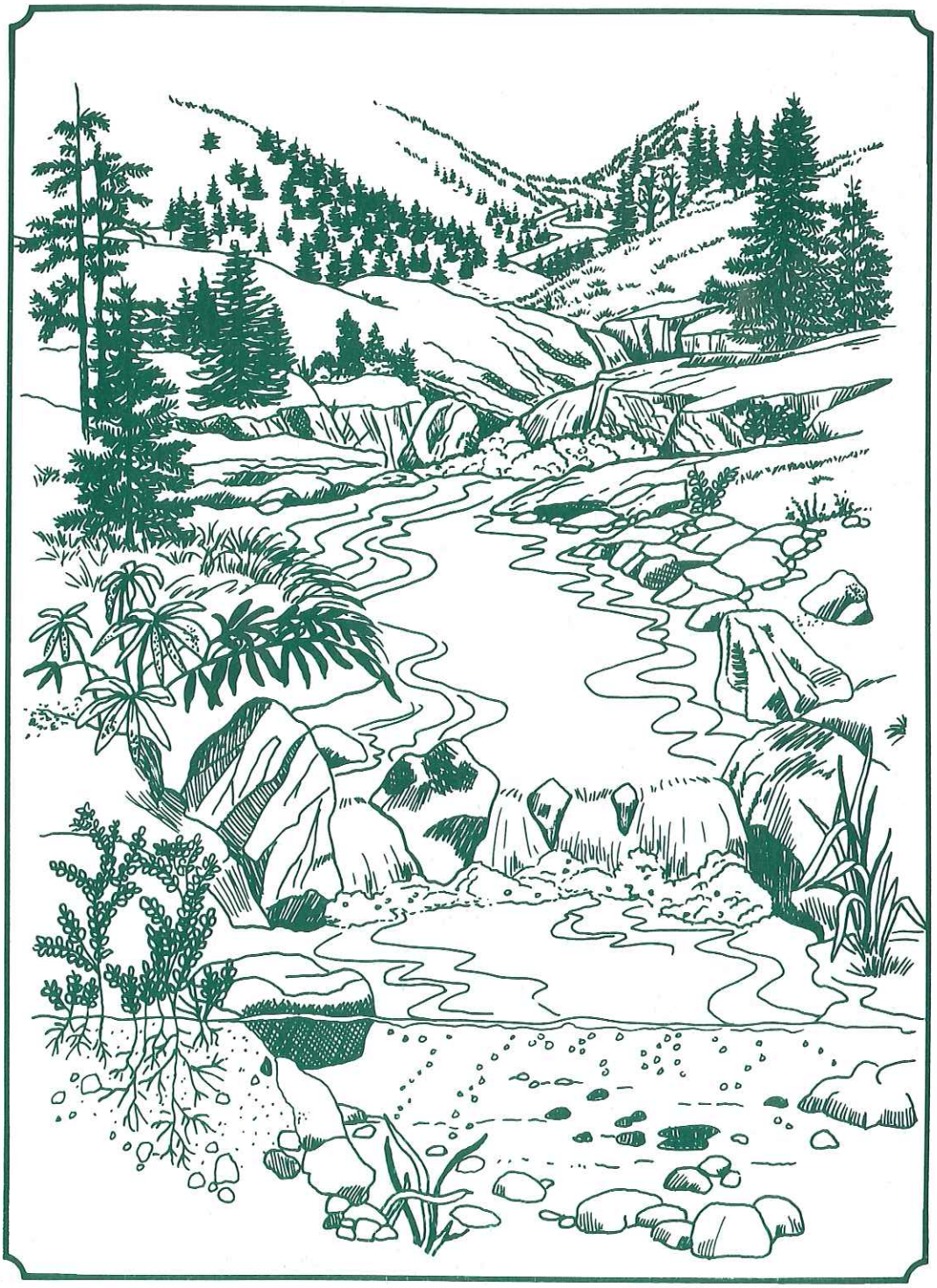
United States
Department of
Agriculture

Forest Service

Nez Perce National Forest Plan

Seventh Annual Monitoring and Evaluation Report



Fiscal Year 1994

Forest Supervisor

June 1995

Dear Reader:

The Nez Perce National Forest Plan was finalized in October 1987. It charted a new course for managing the Forest for 10 to 15 years. It is our contract with you, the people we serve and the owners of the Forest, to manage the outstanding resources of the Nez Perce National Forest in an integrated, sustainable, ecologically sound 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 seven years into our Forest Plan implementation. We recognize that some conditions have changed since 1987. Our Seventh Nez Perce National Forest Annual Monitoring and Evaluation Report highlights our progress.

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

As many of you are aware, the Nez Perce Forest is currently providing data and information in support of the large-scale assessment of the Upper Columbia River Basin. This assessment of past and current resource condition on USFS and BLM lands will cover the entire State of Idaho, western Montana, and a small part of Nevada and Wyoming. The process will culminate in an EIS for this area. We plan to keep you informed of the progress of this effort as it continues. Modification of forest plans and land management plans may result from this effort.

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

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
TTY: (208) 839-2328

Clearwater Ranger District
Route 2, Box 475
Grangeville, ID 83530
(208) 983-1963
TTY: (208) 983-0696

Red River Ranger District
Box 23, Red River Route
Elk City, ID 83525
(208) 842-2255
TTY: (208) 842-2235

Moose Creek Ranger District
P.O. Box 464
Grangeville, ID 83530
(208) 983-2712
TTY: (208) 983-2623

Selway Ranger District
HC 75, Box 91
Kooskia, ID 83539
(208) 926-4258
TTY: (208) 926-7725

Elk City Ranger District
Elk City, ID 83525
(208) 842-2245
TTY: (208) 842-2233

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

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

TABLE OF CONTENTS (continued)

FOREST PLAN MONITORING AND EVALUATION REPORT

NEZ PERCE NATIONAL FOREST

FISCAL YEAR 1994

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. In it, a commitment was made to monitor and evaluate how well the Forest Plan is being implemented. Monitoring and evaluation comprise the management control system, and the results of monitoring and evaluation provide the line officer and the public with information on the progress and results of implementing the Forest Plan.

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

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

- **Implementation Monitoring** [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.

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

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 were also conducted on a variety of projects during fiscal year 1994. 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, 1993, through September 30, 1994. 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. The findings were reported in last year's Monitoring Report. As a 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 II is subdivided by resource emphasis...ie. fish, timber, recreation etc. Section III identifies research needs. Section IV summarizes amendments made to the Forest Plan to date. Section V lists those people who contributed to the preparation of this Report. Following Section VI, the Forest Supervisor Approval, is the Appendix to this report which lists references and status of progress on past action items.

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 targest for these schedules of work, and with actual accomplishments for these activities and outputs for the last three fiscal years 1992-1994.

Project 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.

You will notice that the activity and output projects for the next three fiscal years previously displayed in Table 2 are omitted. In the past Table 2 was included to provide the reader with an estimate of the work that could be completed and outputs produced given funding at levels similar to that received in recent years. With the Regional Office now formulating the outyear budgets, **we are dropping Table 2** - "Projected Outputs and Activities at Proposed Funding Levels" from the Monitoring Report.

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

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

Output or Activity	Units [1]	Original Forest Plan Projection [2]	Fiscal Year 1992		Fiscal Year 1993		Fiscal Year 1994	
			Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]
RECREATION								
Developed/Dispersed Use	PAOT Days	---	300,000	300,000	519,000	437,000	185,000	185,000
Cultural Resource Inventory	Acres	8,000	---	3,664	---	2,290	---	3,429
WILDLIFE & FISH								
Wildlife Habitat Improvement								
Non-Structural								
Appropriated Funds	Acres	5,000	2,375	2,325	1,150	690	1,500	1,175
KV Funds	Acres	---	---	120	---	0	---	63
Challenge Cost Share	Acres	---	---	0	---	0	---	0
Structural								
Appropriated Funds	Structures	---	---	20	---	0	15	15
KV Funds	Structures	---	---	0	---	0	---	0
Wildlife Inventory								
Appropriated Funds	Acres	---	69	8,500	30,000	38,100	15,000	15,000
KV Funds	Acres	---	---	0	---	0	---	0
Challenge Cost Share	Acres	---	---	0	---	0	---	0
Fish Habitat Improvement (Inland & Anadromous)								
Non-Structural								
Appropriated Funds	Acres	50	165	112	135	91	147	136
KV Funds	Acres	---	---	0	---	0	---	9
Challenge Cost-Share	Acres	---	---	0	---	0	---	0
Structural								
T30 Appropriated Funds	Structures	350	159	112	135	56	60	60
T33 KV Funds	Structures	---	---	0	---	0	---	100
Challenge Cost-Share	Structures	---	---	0	---	0	---	0
Fish Inventory (Inland & Anadromous)								
Appropriated Funds	Acres	---	865	765	697	741	542	542
KV Funds	Acres	---	---	3	---	0	---	0
Challenge Cost-Share	Acres	---	---	0	---	0	---	0
T&E Species Habitat Improvement								
Non-Structural								
Appropriated Funds	Acres	64	45	45	50	50	200	200
KV Funds	Acres	---	---	0	---	0	---	0
Structural								
Appropriated Funds	Structures	---	2	2	---	0	10	11
KV Funds	Structures	---	---	0	---	15	---	0
Challenge Cost Share	Structures	---	---	0	---	0	---	0
T&E Species Inventory								
Appropriated Funds	Acres	---	4	5,050	4,000	4,000	45,000	46,600
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)

Output or Activity	Units [1]	Original Forest Plan Projection [2]	Fiscal Year 1992		Fiscal Year 1993		Fiscal Year 1994	
			Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]
RANGE								
Permitted Grazing Use	AUM	43,000	41,500	32,900	30,700	28,900	31,500	27,500
Range Improvement								
Non-Structural	Acres	500	0	0	96	114	80	80
Structural	Structures	---	2	3	7	10	30	29
Allotment Management Plans	Plans	---	4	3	0	0	0	0
Noxious Weed Control	Acres	250	200	202	136	140	270	270
SOIL & WATER								
Soil & Water Resource Improvement								
Excess Timber Receipts	Acres	---	0	5	---	0	---	0
(Appropriated Funds)	Acres	320	220	214	170	244	251	243
(KV Funds)	Acres	---	0	33	---	6	---	6
Soil Inventory	Acres	---	67,000	84,040	33,000	70,000	44,000	47,900
MINERALS								
Minerals Management	Actions [5]	500	417	417	400	718	232	269

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		Fiscal Year 1994	
			Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]
TIMBER								
Acres Harvested								
Clearcut	Acres	---	---	1,793	---	1,650	---	1,718
Shelterwood/Seed Tree Seed Cut	Acres	---	---	849	---	615	---	836
Shelterwood/Seed Tree-Removal/ Final Cut	Acres	---	---	118	---	22	---	722
Commercial Thin	Acres	---	---	631	---	127	---	93
Selection	Acres	---	---	0	---	0	---	17
Other	Acres	---	---	0	---	0	---	907
Acres Sold								
Clearcut	Acres	1,710	---	15	---	371	---	0
Shelterwood/Seed Tree	Acres	2,705	---	0	---	1,384	---	0
Shelterwood/Seed Tree-Removal/ Final Cut	Acres	130	---	0	---	608	---	355
Commercial Thin	Acres	100	---	0	---	0	---	38
Selection	Acres	125	---	12	---	45	---	0
Other	Acres	---	---	145	---	574	---	606
Volume Offered [6] (Total Volume)	MMBF	108	77	50	66	34	66	10.1
Volume Offered (Salvage Volume)	MMBF	---	32	23	34	26	34	10.1
Volume Offered (Non-Salvage)	MMBF	---	45	27	32	8	32	0
Advanced Prep (NEPA)	MMBF	---	92	0	66	20	66	1
Silvicultural Exams	Acres	109,000	---	---	---	---	---	---
(Silvicultural Exam)	Acres	---	---	22,005	---	17,236	---	11,160
(Compartment Field Exams)	Acres	---	---	2,730	---	881	---	2,226
Reforestation								
Planting								
(Appropriated Funds)	Acres	860	1,585	1,494	1,095	1,296	1,095	701
(KV Funds)	Acres	3,200	1,515	1,417	2,023	1,976	2,023	2,951
Site Prep - Natural								
(Appropriated Funds)	Acres	80	100	0	---	0	---	103
(KV Funds)	Acres	1,100	13	0	61	64	61	338
Timber Stand Improvement								
(Appropriated Funds)	Acres	700	579	742	696	870	696	706
(KV Funds)	Acres	300	350	473	350	494	350	148
Excess Timber Receipts		Acres	---	---	0	---	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		Fiscal Year 1994	
			Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]	Targets [3]	Accomplishment [4]
PROTECTION								
Fuels Management Activity and Natural Fuels	Acres	1,060	750	807	1,500	1,613	3,159	2,439
Fuels Management-Brush Disposal	Acres	3,590	2,426	2,366	2,200	3,328	3,644	3,978
LANDS								
Land Exchange	Acres	25	0	24	117	117	118	43
Special Uses	Cases	---	0	133	0	163	0	0
FACILITIES								
Landline Location	Miles	---	20	20	14	14	14	13
Trail Construction/Reconstruction	Miles	20	22	26	16	16	16	28
Excess Timber Receipts	Miles	---	---	---	0	---	0	--- 0
Contributed	Miles	---	---	0	---	10	---	9
Trail Maintenance Levels I - III	Miles	---	1,100	1,832	1,623	1,715	1,623	1,731
Capital Investment Roads	Miles	---	51	12	0	0	0	0.6
Timber Purchaser Credit Roads	Miles	---	150	42	0	47	0	18
Road Maintenance								
Level I	Miles	779	---	930	1,050	537	1,050	1,715
Level 2	Miles	579	---	490	781	200	781	1,001
Level 3-5	Miles	692	---	670	932	400	932	939
Total	Miles	2,050	2,581	2,090	2,763	1,137	2,763	3,655
Road Construction								
Arterial	Miles	3	---	0	---	0	---	0
Collector	Miles	24	---	0	---	2	---	0
Local	Miles	26	---	30	---	28	---	14
TOTAL	Miles	53	---	30	---	30	---	14
Road Reconstruction								
Arterial	Miles	2	---	0	---	10	---	0
Collector	Miles	13	---	58	---	63	---	0
Local	Miles	15	---	43	---	4	---	5
TOTAL	Miles	30	---	101	---	77	--	5
Access Management								
Permanently Closed	Miles	33	---	0	---	0	---	2
Unrestricted	Miles	17	---	2	---	0	---	0
Restricted	Miles	33	---	49	---	30	---	18
TOTAL	Miles	83	---	51	---	30	---	20
Closure Devices								
Gates	Numbers	---	---	3	---	5	---	7
Concrete Barriers	Numbers	---	---	4	---	5	---	5
Earth Berm Barriers	Numbers	---	---	1	---	0	---	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.

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

Significant changes in the outyear budget restructuring process occurred this year, such as new budget line items for ecosystem management, timber sale activities, reforestation, and an increase in the number of activity codes and accomplishment output items. This has necessitated a change in the way the FY95 budget allocation and expenditure tables are displayed.

Table 3 shows the amount of funds allocated to the Forest and expended by the Forest for the last three fiscal Years 1992 through 1994.

Table 4 - "Forest Plan Funding Needs", is now revised to display only the FY 95 projected Forest budget in the new funding description breakdowns.

Dollars have been adjusted to constant 1994 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

The 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 1992		Fiscal Year 1993		Fiscal Year 1994	
	Allocation (M 1994$)	Expenditures (M 1994$)	Allocation (M 1994$)	Expenditures (M 1994$)	Allocation (M 1994$)	Expenditures (M 1994$)
GENERAL ADMINISTRATION						
General Administration	1,728	2,024	1,773	1,742	1,767	1,702
RECREATION						
Recreation	1,099	1,168	1,398	1,473	1,033	986
WILDLIFE & FISH						
Wildlife and Fish	1,239	1,076	1,478	1,359	1,563	1,543
RANGE						
Range	361	296	393	390	413	416
Range (Noxious Weeds)	30	19	47	44	48	45
Range Improvement	22	15	29	38	41	40
SOIL & WATER						
Soil, Air, Water	600	677	632	559	701	718
MINERALS						
Minerals	263	258	265	253	261	252
TIMBER						
Timber Sale Prep/Administration	2,039	2,187	1,344	1,365	693	629
Timber Planning	106	129	245	224	259	252
Silvicultural Exams	453	574	385	358	180	172
Reforestation - Appropriated	794	262	763	682	657	507
Timber Stand Improvement - Appropriated	107	69	182	156	150	104
Tree Improvement	128	249	437	186	368	411
KV Reforestation	1,180	778	1,409	1,244	1,819	1,633
KV Timber Stand Improvement	90	46	77	51	47	14
KV Other	623	371	467	256	425	368
Co-op Work, Forest Service, Other - Trust Fund	231	624	383	374	112	65
Timber Salvage Sales - Permanent Fund	1,052	806	2,436	2,187	2,990	2,495
PROTECTION						
Fire Protection	826	1,481	1,294	1,316	2,517	2,037
Fire Protection (Fuels)	47	70	167	118	168	130
Cooperative Law Enforcement	62	90	37	27	89	77
Brush Disposal (Perm. Fund)	551	459	510	401	476	381
LANDS						
Special Uses	78	64	99	85	75	58
Land Exchange/Ownership Status	24	70	12	7	20	35
Landline Location	182	183	120	120	111	117
Land Acquisition	50	134	631	627	90	71
FACILITIES						
Facility Maintenance	241	238	173	175	220	212
Road Maintenance	807	806	517	523	625	610
Trail Maintenance [4]	1,010	991	879	862	759	697
Recreation Construction	582	498	206	191	235	228
Facility Construction - Forest Admin., Other	0	0	66	60	2	2
Engineering Construction Support	1,937	2,270	814	773	331	328
Construction - Capital Investment Roads	925	925	111	111	497	497
Trail Construction/Reconstruction	544	548	521	410	562	520
Timber Purchaser Road Construction	1,396	1,475	42	2,678	0	2
TOTAL	21,407	21,930	20,242	21,299	20,304	18,354

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

TABLE 4 - PROJECTED FOREST FUNDING LEVEL, FY 1995

Funding Description	FY 1995 (M 1994$)
GENERAL ADMINISTRATION	
General Administration	1,365
RECREATION	
Recreation/Trails MTGE	1,590
WILDLIFE & FISH	
Wildlife and Fish	1,232
Wildlife and Fish Improvements	285
RANGE	
Range	439
Range (Noxious Weeds)	36
Range Improvement	36
SOIL & WATER	
Soil, Air, Water	272
Soil, Air, Water Improvements	301
MINERALS	
Minerals	255
TIMBER	
Timber Management O&M	731
Timber Sale Prep	835
Forestland Veg. Improvement	834
KV Reforestation/TSI/Other	3,172
CWFS Other - Trust Fund	225
Timber Salvage Sales - Permanent Fund	2,931
PROTECTION	
Fire Protection Preparation	1,011
Fuels Improvements	150
Law Enforcement	29
Brush Disposal (Perm. Fund)	500
LANDS	
Special Uses	46
Land Exchange/Ownership Status	15
Landline Location	116
Land Acquisition	90
FACILITIES	
Facility Maintenance	190
Road Maintenance	627
Facility Constr. - Forest Admin., Other	11
Pre-Construction - Capital Investment Roads	815
Trail Construction/Reconstruction	35
ECOSYSTEM MANAGEMENT	332
TOTAL	18,542

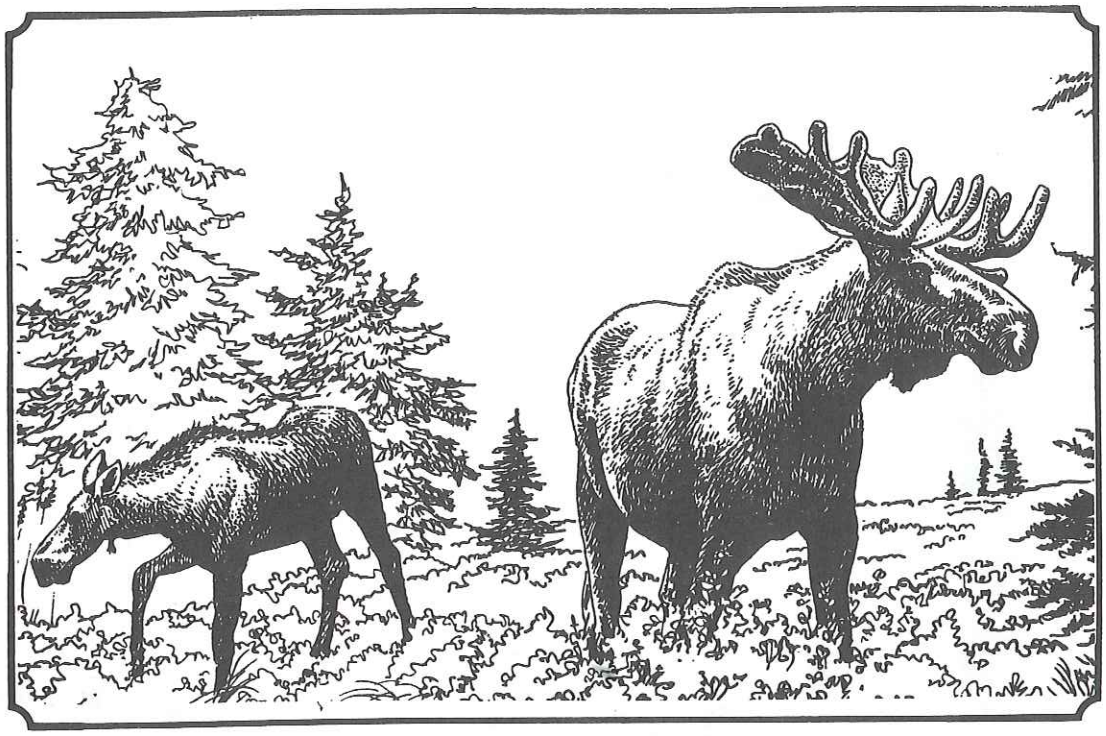
C. Forest Plan Monitoring Requirements

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, 1993 - September 30, 1994)
Reporting Period:	5 years (FY 1994)
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).

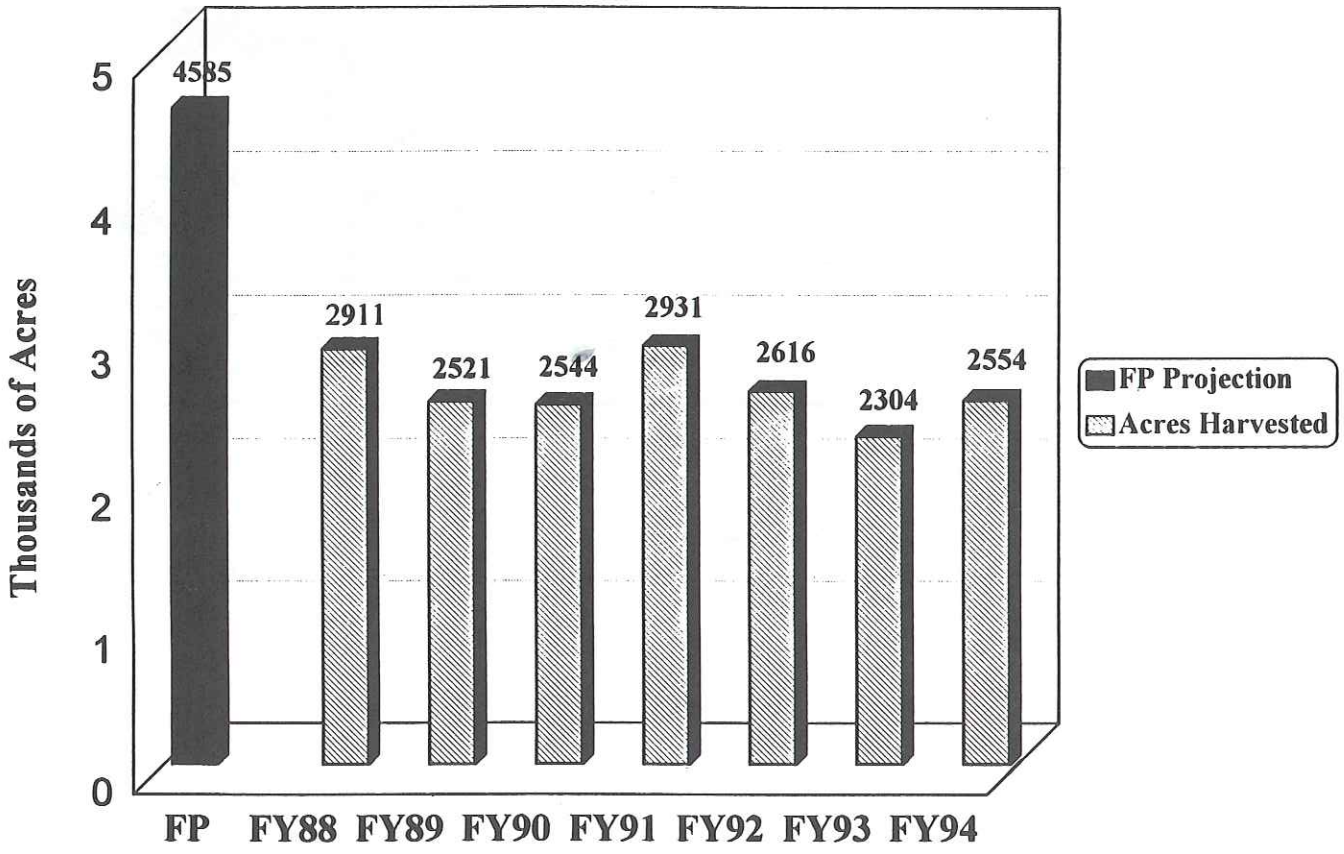
Forage Production

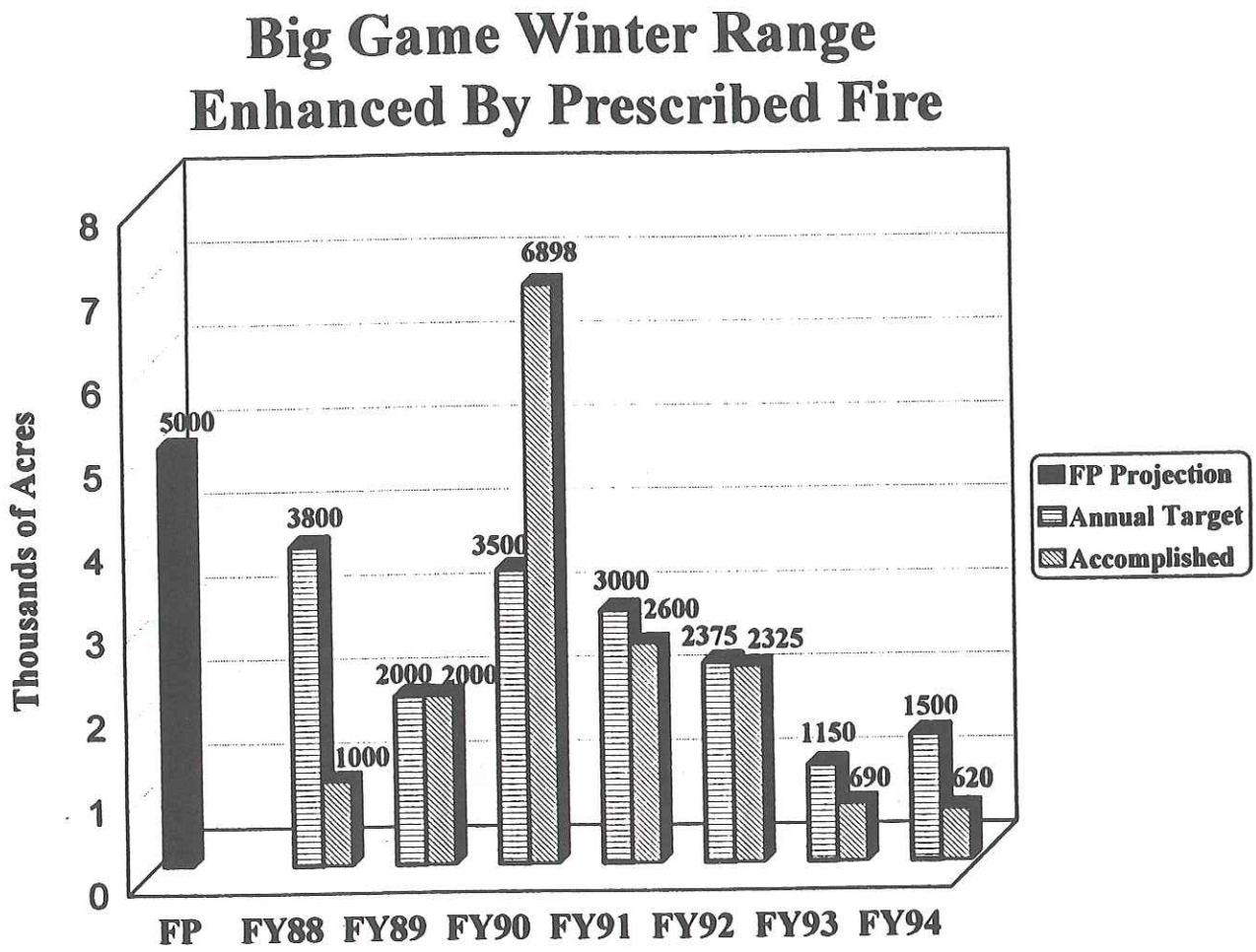
Monitoring Results:

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 94 targets and accomplishments, are depicted in the following graphs.

Big Game Forage Produced by Timber Harvest

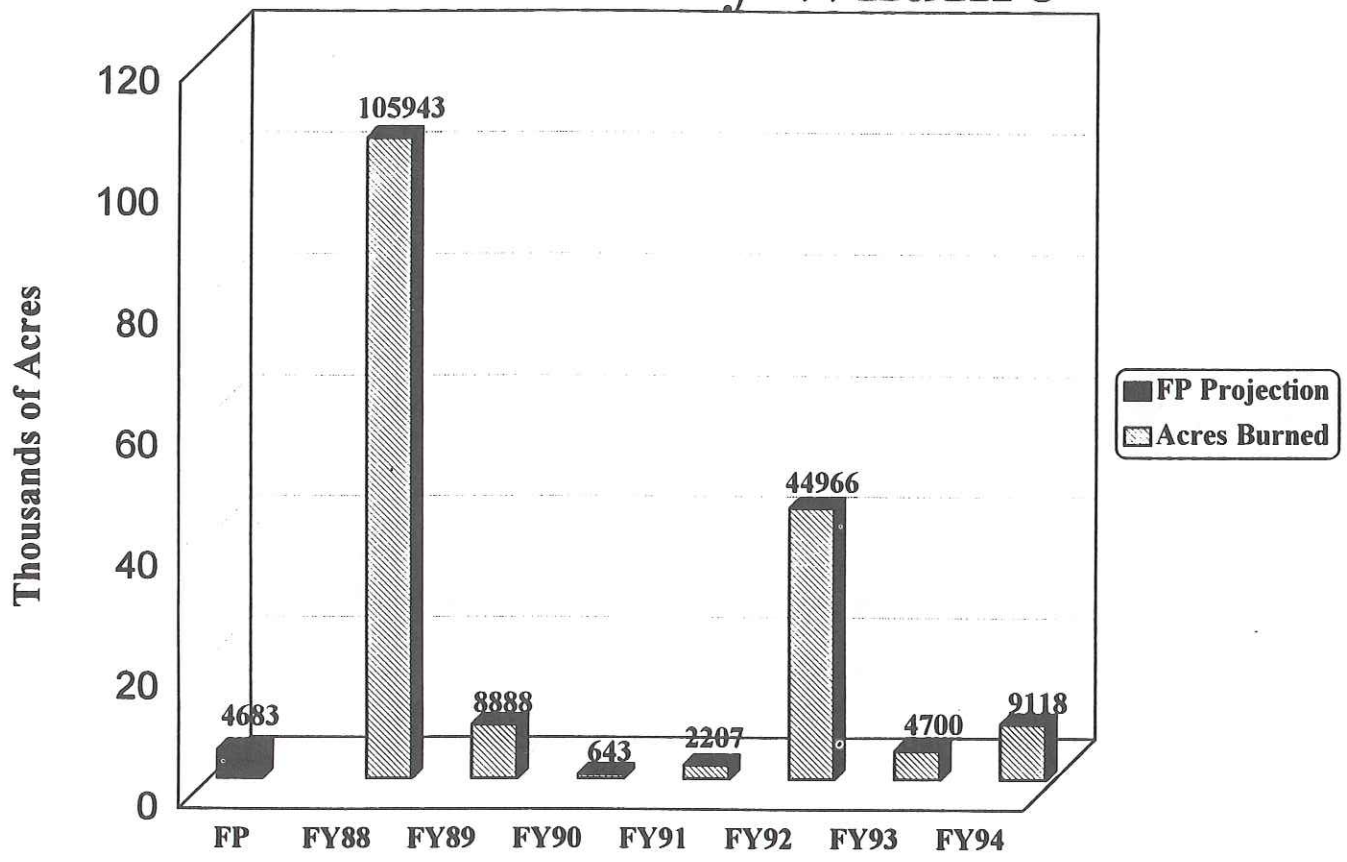




Evaluation of Monitoring Results:

Since Forest Plan implementation, timber harvest that increased big game forage has averaged about 2625 acres per year (59 percent of the Forest Plan projection). Prescribed fire projects for big game winter range has averaged about 2305 acres per year (46 percent of projection). Large wildfires of 1988 and 1993 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



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 94 has been mixed. Assessment of Forest-wide elk summer range conditions indicates: 1) Elk habitat effectiveness objectives are being met or exceeded on about 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)

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

Monitoring Results:

No site-specific or MA 21-specific monitoring was done on the Forest in FY94. The Forest-wide 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, 1993 - September 30, 1994)
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:

No field reviews of compliance with Forest Plan old growth standards was done in FY94 except for incidental review of the Scott Fire Salvage area. Additional replacement snags were left in the sale area partly due to long term conditions that needed to develop within a portion of old growth burned by the wildfire.

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 in ponderosa pine and dry Douglas fir types. The use of fire or some form of silvicultural prescription to thin understory trees which act as "ladder fuels" is needed to protect designated old growth forest from stand-replacing fires. Although timber harvest did occur within MA 20 in FY94, this is in compliance with the amended Forest Plan standards specific to the Scott Salvage Timber Sale. (See discussion of Forest Plan Amendment #17 on page 140 of this report.)

Snag Habitats

Monitoring Results:

Snag management was reviewed on the Scott Fire Salvage Sale in depth in FY94. Snag retention within the sale was modified to leave significantly more snags than required by the Forest Plan because of emerging considerations for Threatened and Endangered Species (particularly black-backed woodpecker), old growth/riparian components and shade for reforestation. The Regional Office approved authorization allowing for purchaser selection of retained snags is fully successful and was encouraged in the future.

Several questions pertaining to fire salvage sales were raised and answered. The Forest Plan snag guidelines were designed for green sales, not large scale fire salvage sales. Fore this reason, the snag management standards were amended to capture larger and more numerous snag replacements. The number of soft snags after such a fire is very limited.

Threatened and Endangered Species Habitats

Monitoring Results:

Surveys were conducted to detect wolf presence in the Penman Hill, Rainey Day, Pilot Knob, O'Hara Saddle, and West Fork Clear Creek areas. The effort yielded no positive results. Forest biologists investigated several reports of possible sightings or other evidence (including potential scats) of wolf occurring on the Forest. The U.S. Fish and Wildlife Service and the Idaho Department of Fish and Game aerially searched the Red River area and Selway-Bitterroot Wilderness for radio signals from 14 unaccounted Montana wolves. None were detected on the Nez Perce Forest.

Management and protection of threatened, endangered and sensitive wildlife and habitats are routinely evaluated in NEPA documents. In FY 94, no cases of "formal consultation" were required for any terrestrial 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, deer, and moose).

Gray Wolf

Numerous unconfirmed reports over the past six years suggest individual 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 active 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 areas adjacent to the Gospel-Hump Wilderness. Evidence from the Clear Creek drainage also suggests recent wolf presence.

Grizzly Bear

The Forest is an active participant on the Bitterroot Grizzly Bear Recovery Subcommittee and upcoming EIS. The mission of this EIS 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. Membership includes representatives from both Idaho and Montana Departments of Fish & Game. This group provides management direction to the technical work groups. The Forest Wildlife Biologist serves as a permanent member of the Biological Work Group. The role of the work group is to provide the best scientific and biological information possible. In spite of two unconfirmed grizzly bear reports near Square Mountain and Dixie in FY94,. no conclusive evidence exists that the bears were grizzlies.

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. One peregrine falcon fledged from that nest in 1993. The pair then changed the nest location about 100 feet from the '92 nest location. Four sightings of peregrine falcons were reported in the area near Oregon Butte and Dixie Summit.

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	1994
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	2 1
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	3 1
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	9 3
Grand Total		14	10	9	17	9	7	13	21	23	19

Evaluation of Monitoring Results:

The winter survey routes located on the Forest yielded 14 adults and 5 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. Observations by Forest employees, agencies and citizens have not as yet located or confirmed any active bald eagle nests on the Forest to date.

Forest Service Sensitive Plant Species

Monitoring Results

A Challenge Cost Share project was initiated in FY 94 with the Idaho Conservation Data Center. The project is using existing data to develop a conservation stratey for *Allotropa virgata* (candystick)-a Northern Region sensitive plant. The conservation strategy is intended to conserve the populations of candystick across five National Forests in two regions. The strategy will be finalized in FY95.

Surveys and project clearances continued for the 28 plants designated by the Regional Forest 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 5th year of sampling nine permanent plots on the Red River Ranger District. Individual plants are marked and tracked over time. The monitoring is designed to track the effects of three treatments-control, edge and logged-on the population of candystick. The nine-25 sq. meter plots contained 116 plants during the summer of 1993. The permanent plots were reread in 1994. The number of flower stems (21) in all plots were greatly reduced from 1993 levels. Lower soil moisture may have contributed to the reduced levels as compared to 1993 and complicates the interpretation of effects from management activities. Monitoring is planned to continue over the next 2-3 years.

Permanent transects were established in 1993 to monitor broad-fruit mariposa on the Salmon River District and Clearwater District. Individual plants were located and marked within 160 m2 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. The population were monitored again in 1994. There was

substantially fewer flowering plants within the permanently marked plots when compared to 1993. The dry, drought like conditions the area experienced in 1994 may have contributed to reduced flower production. Monitoring of the permanent transects will continue over the next few years.

Permanent transects have also been established to determine how Payson's milkvetch responses to management activities. Five transects on the Elk City Ranger District and four transects on the Red River Ranger District were monitored in 1993 and 1994. This on-going project will be maintained for the next few years.

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 may 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.

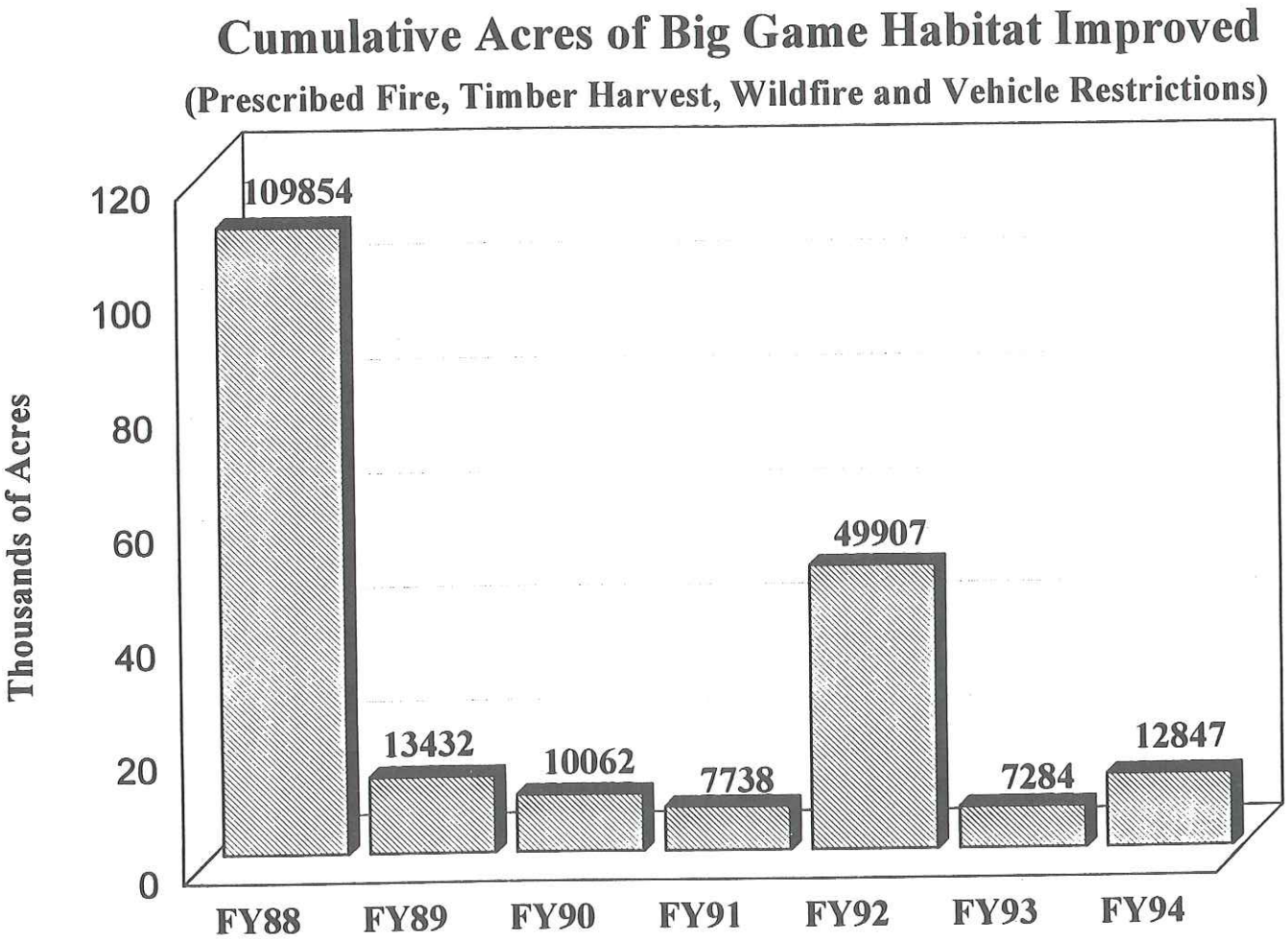
Monitoring results indicated that population trends for the dogwood continues downward due to the presents of Dogwood Anthracnose disease.

Item 1e:	Acres of Big-Game Habitat Improvement
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
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 1994, 920 acres of a 1,150 acre Forest target were 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 16,420 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 2,305 acres per year. This falls short of the annual target of 5,000 acres by 46 percent. The cumulative shortfall over 7 years is approximately 18,680 acres.

During FY94, the Forest Wildlife Biologist twice scheduled a field review with Nez Perce Tribe wildlife biologists to areas recently burned by wildfires. Both meetings were intended to encourage participation by the Nez Perce Tribe to determine what if any portion of wildfires on winter ranges should be counted in calculating big game habitat improvement accomplishments. Due to scheduling conflicts and other priority work, Nez Perce Tribal biologists were unable to participate in either exercise and as such, the reviews were cancelled. The Forest will attempt to reschedule field reviews and negotiations with the Tribe in FY95 in an effort to meet the terms of the Nez Perce Tribe's Forest Plan appeal settlement agreement.

Item 10:	Population Trends of Indicator Species--Wildlife
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
Reporting Period:	3 to 5 years (FY 1990 to 1994)
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:

Elk surveys were completed only in units 10, 10A, 12, and 20 in 1994. Hunt units off the Forest are not reported here. Winter census surveys since 1988 have yielded the following results:

Elk Population Estimated by Sightability*							
UNIT [1]	1988	1989	1990	1991	1992	1993	1994
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	---	1115

*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	1994
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	---	19

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	1994
15	---	---	39		---	43 +/- 17	___
16	---	---	16		---	21 +/- 4	___
16A	32	---	---	30	---	---	---
17	27	---	---	24	---	---	---
19	---	24	---	---	32	---	---
20	---	22	---	---	34	---	24

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.

Total population in unit 20 is stable. Bull:cow ratios were down significantly in 1994 compared to 1992 estimates. Calf:cow ratios in unit 20 were significantly lower. Bull:cow ratios continue to be a serious concern in units 15 and 19. There were not surveyed in 1994.

Update on cow elk harvest study: Evidence from other big game species and analysis of elk populations in other states and countries suggests that elk populations may be most productive when not at highest densities. High densities may result in lower adult survival rates. A study was initiated by Idaho Fish and Game in 1992 to determine appropriate controlled antlerless elk permits. Unit 20 is a part of this study. Thus far, higher harvest rates on cows has not led to population declines and increased calf:cow ratios appears related to higher cow harvest rates.

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
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.

An extensive aerial survey of the upper Selway from Paradise to Magruder revealed 27 sheep in Stewart Creek and Sheep Creek. Nine rams were reported by an outfitter on April 27, 1994, in Deep Creek.

Pileated Woodpecker
Monitoring Results:

Due to inadequate funding, none of the five permanent pileated woodpecker survey routes were sampled during FY94. 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	1994
Totals	9	9	6	13	6	No Survey	No Survey

Evaluation of Monitoring Results:

Highly variable results indicate sampling size should be increased in an effort to improve sampling reliability. Data to date suggests pileated woodpecker populations are relatively stable. Highest densities of sampled pileated woodpeckers occur in Green Creek Point area where much large diameter, decaying grand fir remains intact.

In 1994, the Forest implemented, as part of a Northern Region strategy, an annual survey of fixed transects to determine trends in neotropical migratory birds. Preliminary results from the first year's data revealed 65 different neotropical migrant birds on the Forest. Seventeen transects were surveyed through a partnership with Potlatch Corporation.

Pine Marten/Fisher

Monitoring Results:

Due to inadequate budget levels, no fisher/pine martens were monitored in FY 94. One fisher sighting report was made by Dennis Talbert (Selway RD Wildlife Biologist) in the Swiftwater Creek/Lodge Creek area.

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, population trend for fishers is inconclusive. Based on a local study (Jones, J. 1991. Habitat Use of Fisher in North Central Idaho, M.S. Thesis, University of Idaho - available at Nez Perce National Forest Headquarters Office), populations may be as much influenced by incidental trapping as by changes in habitat. Consistent, long term data collection may produce more useful data.

Goshawk

Monitoring Results:

Survey efforts to detect goshawks or their nests continued in FY94 within the Cove and Mallard timber sale area. Two active nests were found in the unharvested Jack Timber Sale area. Each nest fledged two young in FY94. Three additional sightings were reported from the Red River Ranger District. One goshawk sighting was reported on the Clearwater Ranger District while the bird was seen preying on a Columbian ground squirrel in a large, natural meadow. A newly discovered active nest was also discovered on the Clearwater District adjacent to a moist meadow area. Red squirrel prey evidence was found in association with the nest. While red squirrels are well documented in the goshawk prey literature along with grouse and snowshoe hares, Columbian ground squirrels evidently provide an unusual dimension to goshawk prey diversity from natural and man-made openings.

Updates on previous nests/nest territories: In 1992, an active goshawk nest was discovered in a harvest unit of the China Cow sale during harvesting activities. A five acre "leave" strip around the active nest was left completely uncut to protect it. Despite the adjacent harvest activity and ongoing disturbance, at least one chick was confirmed fledged from this nest in 1992. The nest was monitored and found to be unoccupied in 1993. In 1994, another active nest approximately one-half mile north of the 1992 nest was discovered and is assumed to be an alternate nest within the same territory. Both nest trees are douglas firs situated within grand fir types. Evidence at a nearby plucking post (92 nest), indicated that snowshoe hare (a species found in edges, openings and early seral forest conditions) was preyed upon. A review of the landscape conditions around both nests within the 6947 acre Cow Creek review area found that the area has experienced harvest activity dating back to the 1950's through 1992. A variety of treatments have been applied since the 1950's including clearcuts (17.4% of the 6947 acre watershed), shelterwood harvest (1.1%) and a variety of other treatments (commercial thin, salvage, seed tree, selection, etc.) totaling just over 28% of the 6947 acre landscape. This example, though inconclusive, offers some preliminary insight into goshawk tolerences of landscape change within grand fir habitat types and a possible measure of goshawk dependency upon presence of edges, openings and seral diversity necessary to provide better depth of understanding of goshawk tolerances for landscape change. To what degree human-induced landscape changes may have affected nest productivity in this example, is undetermined.

Neotropical Migratory Birds

Though not considered indicator species at this time, surveys for species diversity and relative abundance of neotropical migratory birds were done in FY94 through a partnership with Potlatch Forest Industries. Twenty-three transects incorporating 214 sample points scattered across the developed portions of the Nez Perce Forest yielded 65 different bird species. The six species of highest relative abundance from

survey results (over 100 samples) included: evening grosbeaks, red-breasted nuthatch, dark-eyed junco, golden crowned Kinglet, red crossbill and Townsend's warbler. The least common species from the survey (only single sightings) included: Lazuli bunting, northern water thrush, rufous-sided towhee, white-throated swift, sharp-shinned hawk, Kingfisher, common yellow throat and red-tailed hawk.

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, 1993 - September 30, 1994)
Reporting Period:	2 to 5 years (FY 1989 to 1994)
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:

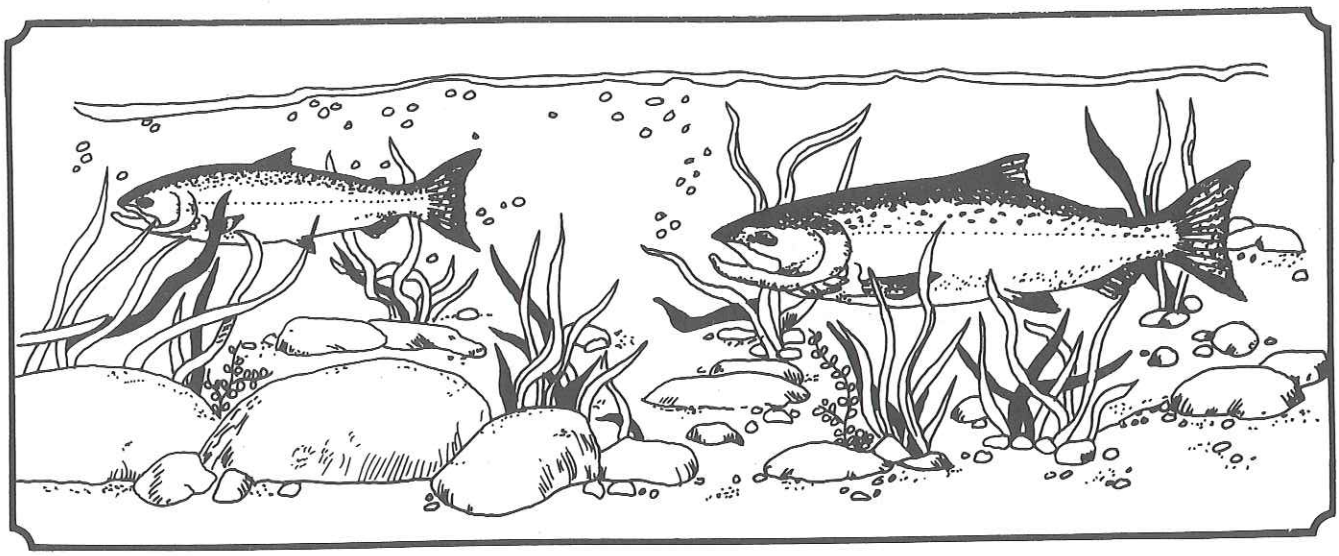
Changing elk management issues and the influences of new access vehicles are not properly addressed by the current summer elk habitat effectiveness guidelines.

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, 1993 - September 30, 1994)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	+/- 10% of Plan targets within a decade.

From our Forest Plan the direction and emphasis for fisheries management is quite clear. The desired future condition is described for anadromous and resident fish habitat as being managed at 87 and 81 percent of biological potential Forest-wide, respectively.

Management goals are to: A) Provide and maintain a diversity and quality of habitat that ensures a harvestable surplus of resident and anadromous game fish species; B) Provide and maintain a diversity and quality of habitat to support viable populations of native and desirable non-native wildlife species, C) Provide habitat to contribute to the recovery of Threatened and Endangered plan and animal species in accordance with approved recovery plans, and D) Provide habitat to ensure the viability of those species identified as sensitive.

Specific Fisheries Objectives are designed to increase Anadromous fish habitat potential to 87 percent, 1 percent above the present level of 86 percent of habitat potential, through four measures: direct habitat improvement, soil and water resource improvement, use of fishery/water quality objectives for individual drainages, and maintenance of current high habitat levels in areas designated to remain roadless. These improvement measures will also benefit identified sensitive fish species (Chinook salmon, summer steelhead trout, bull trout and westslope cutthroat trout) and other resident fish.

Emphasis will be placed on structural improvements and re-establishment of riparian vegetation in those areas degraded through past dredge mining. In addition, projects which address existing excess sediment in the habitat will be given priority. The effectiveness of these improvement practices and drainage objectives will be monitored using standardized fish habitat survey techniques.

The single most important source of information to monitor progress in this element is the annual budget. Allowable variation in this element would be +/- 10 percent of scheduled improvement dollars/targets. If the annual budget for direct habitat improvement and maintenance falls outside of these bounds, considering all sources of funding, the program would be further evaluated and the necessary adjustments in Forest outputs will be made.

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.

Direct habitat improvements and the maintenance of existing improvement measures are key elements in meeting fish habitat production goals for the Forest. The fish/water quality objectives in Appendix A of the Forest Plan indicate that several drainages are currently below their desired objective. This monitoring effort is designed to ensure that the direct habitat improvements scheduled for these streams are accomplished and the habitat is improved to the stated objective.

Additional sources of information on this element are quarterly attainment reports which will be monitored to ensure projects are being completed in a timely manner. Quality of work will be monitored through field review of projects to insure that state-of-the-art habitat improvement techniques are being employed. Project funds are used to monitor improvement measures to ensure that fish populations are responding as expected.

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 1994 the Forest accomplished 163 acres and 60 structures of fish habitat improvement work. This amounts to 56 percent of the Forest Plan annual projection of 400 acres and/or structures of habitat improvement. Also in 1994, the Forest accomplished 542 miles of stream inventory. The Forest Plan did not project an accomplishment figure for miles of stream inventory. There has been a change in the strategy being employed to achieve stream habitat condition objectives. A more complete understanding of the watershed is required before instream structural improvement will be employed. The stream surveys are an important part of gaining that understanding.

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

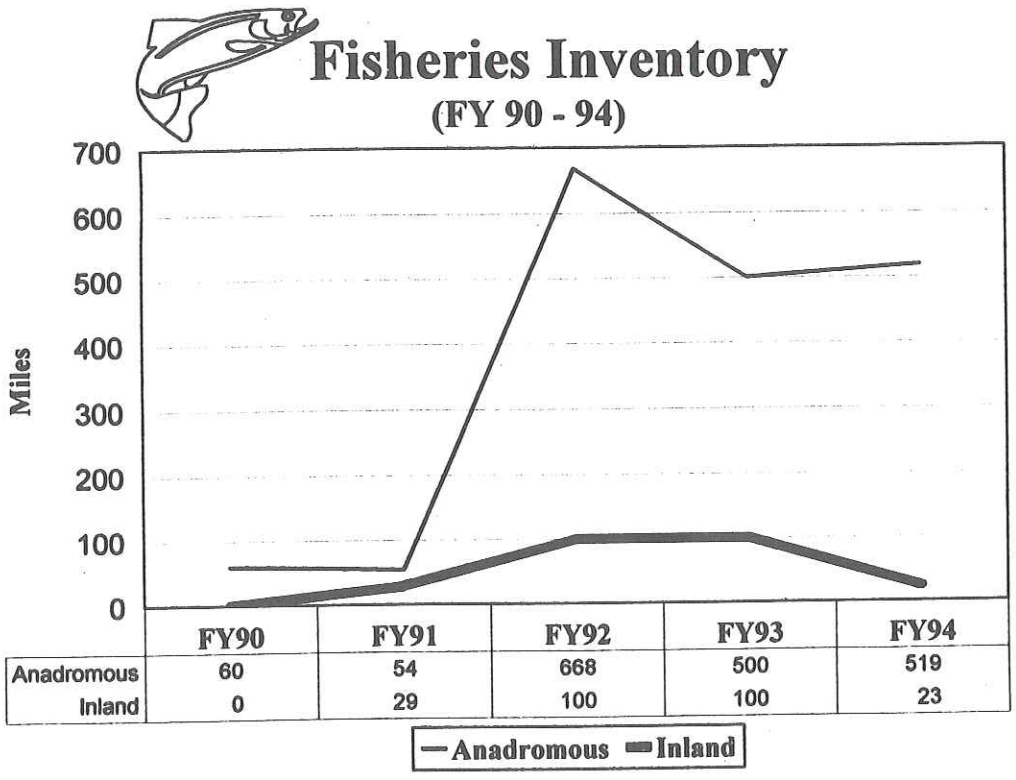
Fish Category	Funding Source	Acres Accomplished	Structures Complete	Miles of Inventory
Inland	Appropriated	9	12	23
Anadromous	Appropriated	136	48	519
Inland	Contributed	0	0	0
Anadromous	Contributed	0	0	0
Inland	KV	0	0	0
Anadromous	KV	18	0	0
Totals	All Sources	163	60	542

Inventory: The cooperative study with Idaho Fish and Game and Bureau of Land Management in the South Fork Clearwater continued, with a special focus this year on the bull trout population movement in Newsome Creek. This involved a wier in Newsome Creek and inventory work in the potential upstream "nursery" areas of the drainage. Surveys in FY 94 included four high lakes: Emerald, Bills, North Goad, and South Goat.

Stream segments in Pettibone, Brave, and East Moose Creeks below stocked high lakes were inventoried to determine the extent of downstream migration by brook trout, which is a non-native species that competes with native bull trout and cutthroat trout.

Stream surveys were completed in the Little Slate; Van Buren Tributary of Little Slate; and Dead Horse Tributary of Little Slate. The survey for Van Buren discovered a significant bull trout population.

The Nez Perce Basin-wide survey was conducted on several miles of two tributaries to Upper Bargamin Creek. The objectives of this project were to determine the presence of chinook spawning habitat and to assess the population of bull trout.



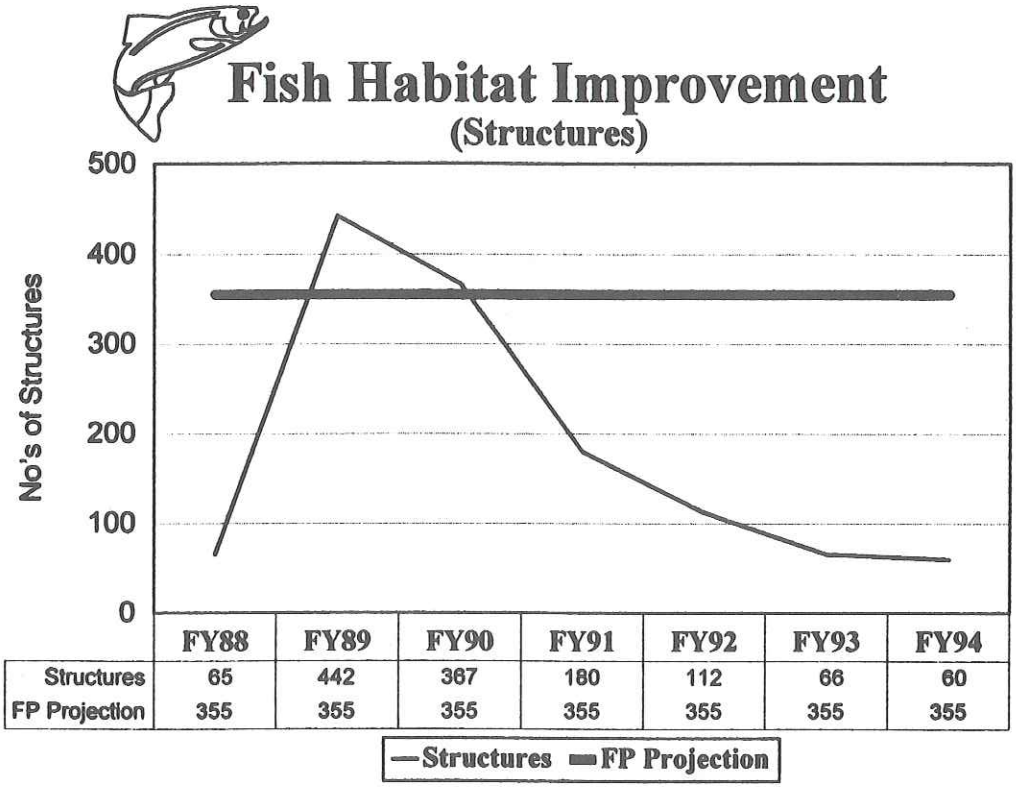
Habitat Improvement

The habitat improvement project on the Selway Ranger District was located in the lower two miles of 19-mile Creek. This section of stream was severely affected by a natural debris slide in 1964, resulting in the removal of natural structures such as logs and rocks. This operation consisted of placing 250 logs and/or root wads at 84 sites along the creek by helicopter. They were placed within or immediately adjacent to the stream channel to improve fish habitat as well as riparian zone.

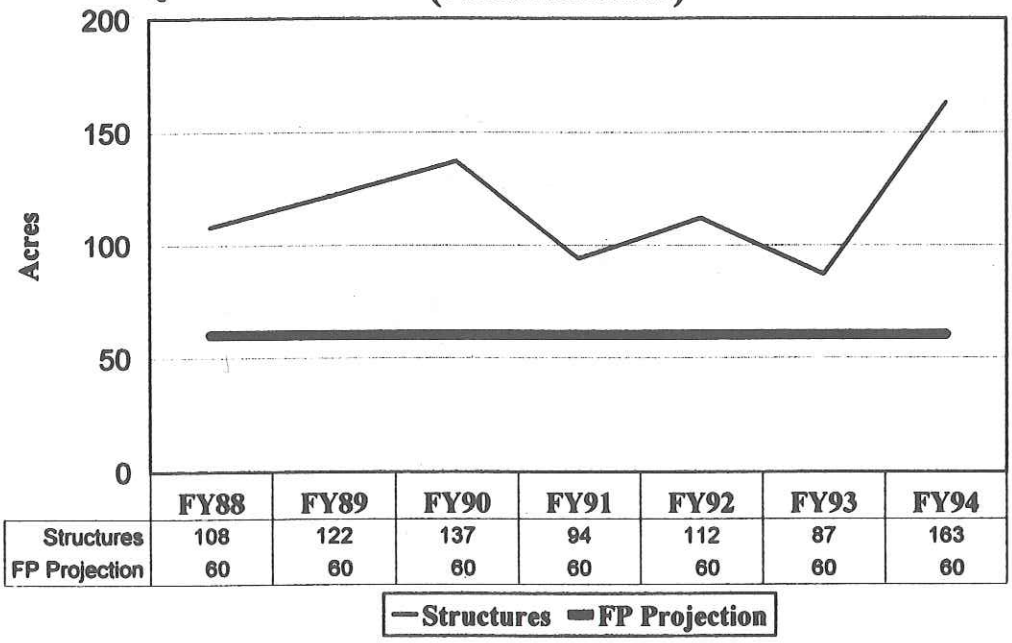
A partnership between the Forest Service, Idaho Department of Fish and Game, the Nez Perce Tribe, and the Nez Perce chapter of Trout Unlimited was completed for the improvement of the Fenn Pond. Reconstruction of the existing pond involved increasing pond depths to provide better fishing for stocked rainbow trout, providing parking and picnic areas, boardwalks, fishing piers and landscaping. The pond is accessible to physically challenged users, young children and elders who use the area to fish for stocked rainbow trout, picnicking and viewing interpretive information.

Evaluation of Monitoring Results:

Forest lands management of aquatic habitats was done to provide for protection and, where needed, recovery for all aquatic species at risk, including sensitive species (i.e. bull trout, steelhead, and cutthroat trout). It was recognized that it is important to work with these species and their habitat requirements prior to the need to list them under the ESA.

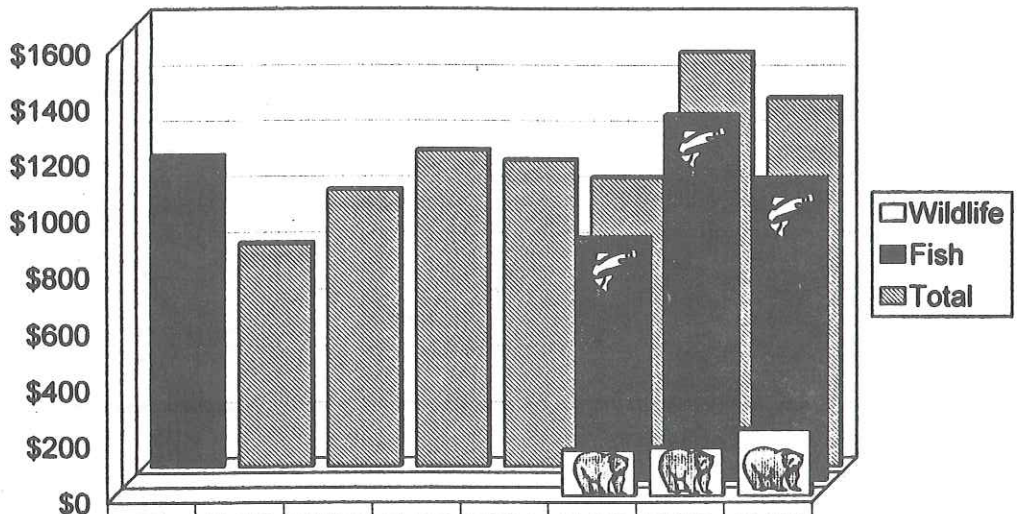


Fish Habitat Improvement
(Nonstructural)



	FY88	FY89	FY90	FY91	FY92	FY93	FY94
Structures	108	122	137	94	112	87	163
FP Projection	60	60	60	60	60	60	60

$ Wildlife/Fish Annual Budget
FY 88 - 94



	FP	FY88	FY89	FY90	FY91	FY92	FY93	FY94
Wildlife						$162	$171	$236
Fish						$862	$1303	$1075
Total	$1102	$789	$979	$1121	$1087	$1024	$1474	$1311

Evaluation of Monitoring Results:

As was reported in the 1993 monitoring report, the listing of spring/summer and fall chinook as "endangered" under the Endangered Species Act has resulted in the Forest fisheries personnel being focused on Section 7 watershed assessments. The monitoring of structural and non-structural improvements and their effectiveness was not accomplished in 1994 due to the lower priority given to this type of monitoring.

Fisheries habitat improvement (non-structural) has been emphasized on the Forest and is reflected in the sustained accomplishment well above the Forest plan objective of 60 acres per year. Habitat improvement monitoring was completed on 11 stream reaches, however summary documents have not been completed.

Item 2e:	**Fish Habitat Trends by Drainage**
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
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 1994. The table summarizes the type of information collected to date at each monitoring station.

Permanent Monitoring Station Name	Site Surveyed in FY 94	Years Having Habitat Survey Data	Years Having Fish Density Estimates	Habitat Map of Site Available?
N.Fk.White Bird Creek*	Yes	1988,1989,1990,1993,1994	1988,1989,1990,1993,1994	Yes
S.Fk.White Bird Creek	Yes	1988,1989,1990,1993,1994	1988,1989,1990,1993,1994	Yes
N.Fk.Slate Creek*	Yes	1988,1989,1990,1993,1994	1988,1989,1990,1993,1994	Yes
Little Slate Creek	Yes	1988,1989,1990,1993,1994	1988,1989,1990,1991,1993,1994	Yes
Johns Creek*	No	1987,1988,1989,1990,1991	1987,1988,1989,1990,1991,1993	Yes
North Meadow Creek	No	1988,1989,1991	1988,1989,1993	Yes
N.Fk.Red River Upper*	Yes	1988,1989,1990,1994	1989,1990,1994	Yes
N.Fk.Red River Lower*	Yes	1989,1990,1994	1989,1990,1994	Yes
Trapper*	Yes	1988,1989,1994	1989	Yes
S.Fk./W.F.Red River[1]	No	1988,1989,1990		Yes
Upper Big Mallard Cr.[2]	No	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]*	No	1988,1989,1990,1991,1993	1988,1989,1990,1991,1993	Yes
Meadow Creek Middle[4]*	Yes	1990,1993,1994	82-83,87-88,1990,1993,1994	Yes
Sable Creek	Yes	1987,1988,1990,1993,1994	1983,1987,1988,1990,1993,1994	Yes
Butte Creek	Yes	1987,1988,1990,1993,1994	1987,1988,1990,1993,1994	Yes
Tenmile Creek*	Yes	1988,1990,1993,1994	1988,1990,1993,1994	Yes
Lower Crooked River*	Yes	1988,1990,1993,1994	1988,1990,1993,1994	Yes
Lower Newsome Creek*	Yes	1988,1990,1993,1994	1988,1990,1993,1994	Yes
Upper Newsome Creek*	Yes	1988,1990,1994	1988,1990,1994	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.

Evaluation of Monitoring Results:

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

Planning, collecting and analyzing monitoring data has received low priority due to the workloads associated with ESA consultation for the proposed and ongoing land management activities between 1992 and 1995, and information requested through the Freedom of Information Act (FOIA).

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.

Nine permanent monitoring stations have had five years or more of data collection. They are North Fork Whitebird Creek, South Fork Whitebird Creek, North Fork Slate Creek, Little Slate Creek, Johns Creek, Meadow Creek Lower, Meadow Creek Middle, Sable Creek and Butte Creek. There are large variations in such parameters as acting debris, potential debris, pool quality, and instream cover. These inexplicable variations suggest the possibility of inconsistences in methodology or erroneous data collection in the field. These inconsistencies must be examined thoroughly before determining the validity of the monitoring results.

Necessary analysis of monitoring data has not kept pace with the demand for this information. Data summarization and analysis is being conducted in conjunction with data requests. As aquatic condition data is being requested through the Freedom of Information Act (FOIA), the Forest is using this as an opportunity to summarize and analyze all aquatic condition data, including data from the Forest plan monitoring stations. More emphasis on data summarization and analysis will provide better information on habitat condition.

STREAM SURVEYS:

Basinwide Surveys -- The following systems were surveyed using the Basinwide Stream Survey technique (Nez Perce National Forest Basinwide Survey Methodology, 1991): Middle Meadow, Lower Meadow, Fall, Covert and Sabe Creeks.

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, 1993 - September 30, 1994)
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. On May 26, 1995, both fish species were reclassified as endangered, due to their continued decline.

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).

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

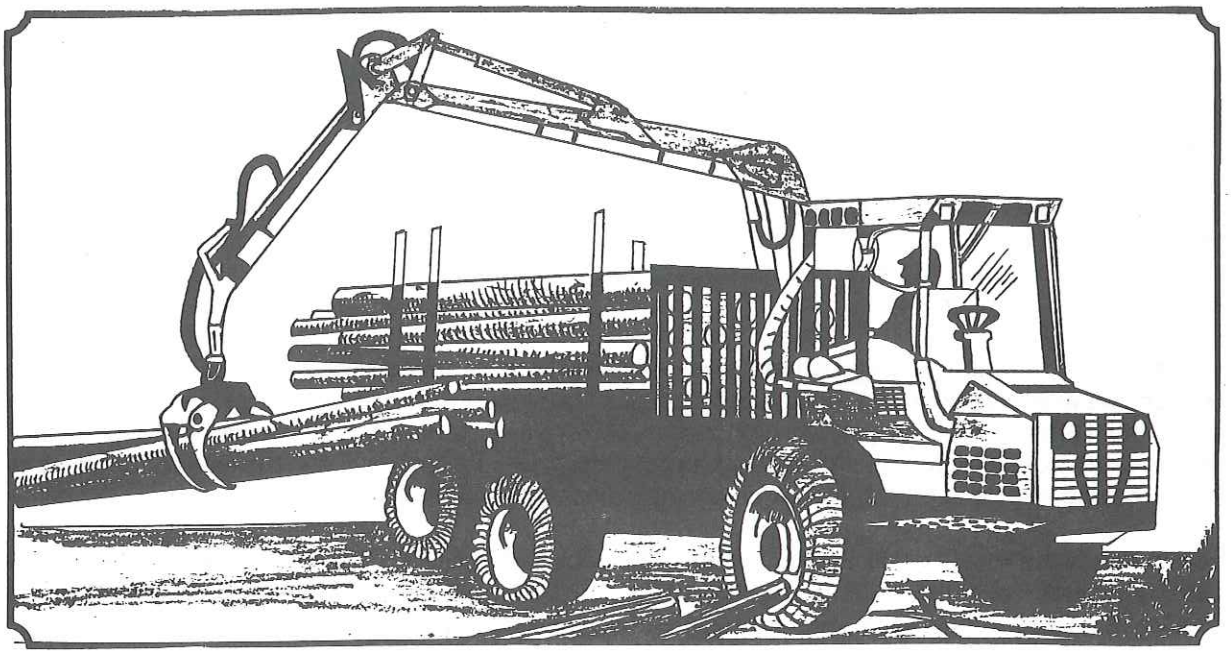
SUMMARY OF SEC 7 CONSULTATIONS WITH NMFS - NEZ PERCE N.F.

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	Completed	Concurrence 8-19-94
Selway River	4-1-95	Being reviewed	
South Fork Clearwater River	4-1-95	Being reviewed	
Lower Salmon River	4-1-95	Being reviewed	
M.F. Clearwater/Clear Creek	4-1-95	Being reviewed	
Rapid River/Little Salmon	4-1-95	Being reviewed	
Castle Creek Reclamation		Completed	11-23-93 (completed)
Salmon River Seed Orchard			2-14-94 (completed)
Allison Creek Bridges			5-24-94 (completed)
Potato Hill Road Use			
American Eagle Timber Haul	4-14-94	Review Pending	

* Sec 7 Watershed Assessments are in Bold type

** The BA or biological assessment is a document prepared by the Forest Service. The BA is submitted to the National Marine Fisheries Service (NMFS) for their review. NMFS then responds back to the Forest with a biological opinion. This completes the consultation process for all ongoing and proposed projects identified in the BA.

Timber



Item 1h-1:	Allowable Sale Quantity (ASQ) Sold By Components
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
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 (Forest-wide 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 94, the volume sold was 14.4 MMBF (chargeable, 13.0 MM, and non-chargeable, 1.4 MM) and the volume offered was 10.3 MMBF (see table below and on page 44).

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 after bidding 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.

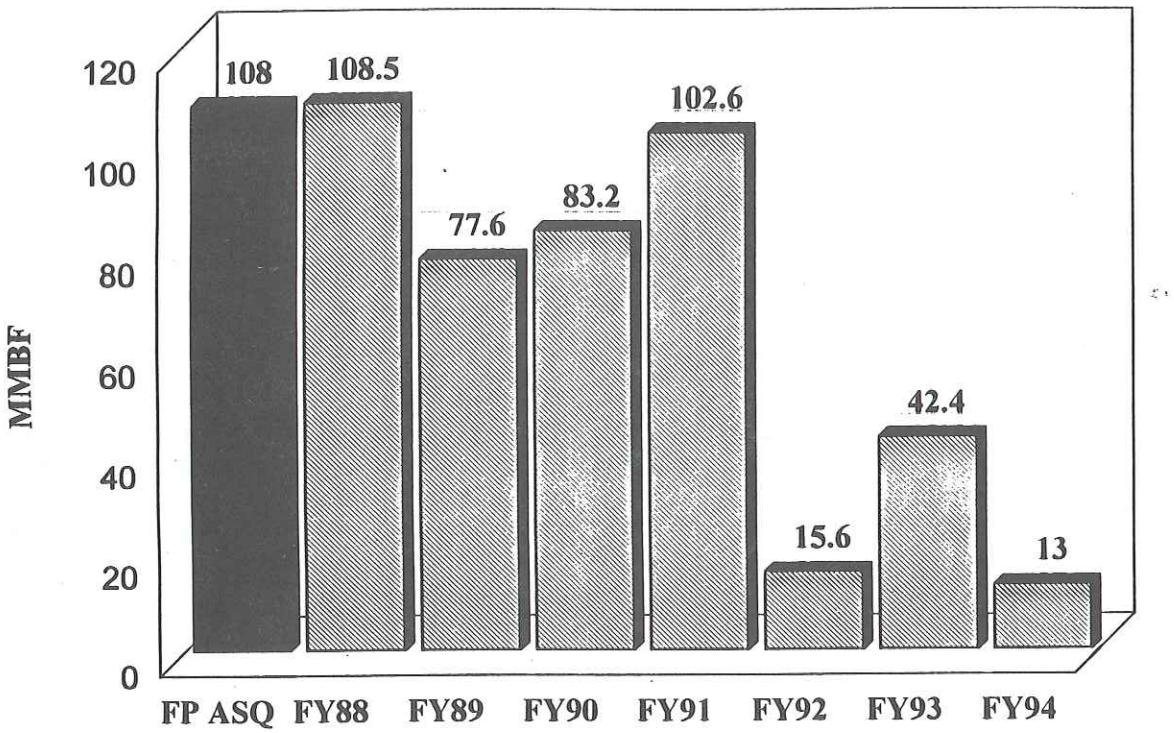
Monitoring Results:

CHARGEABLE VOLUME SOLD IN FY 1988-1994[1]
(Volume Credited Toward ASQ on an Annual Basis)

Components	Volume (MMBF)						
	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
Regular	104.8	68.9	70.2	94.3	1.3	32.1	6.6
Noninterchangeable (NIC)							
Pulp	1.3	7.6	10.3	4.8	14.2	10.2	6.4
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	13.0

[1] The ASQ accomplishment breakdown was based on the Nez Perce Periodic Timber Sale Accomplishment Report accumulated as of September 30, 1994 (fiscal year summary).

Chargeable Volume Sold By Year
(FY 88 - 94)



Seven years of sold sale monitoring have shown that the Nez Perce has sold 71 percent of the scheduled acres, which contained only 59 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 revision.

Analysis of the two ASQ components on the Forest (regular green and non-interchangeable) shows that in the first seven year of the planning decade (beginning in 1988) the Forest has sold 52 percent of the sawlog component and 185 percent of the non-interchangeable (NIC) component (pulp and cedar products).

In fiscal year 1994, the Forest sold 1.4 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	1994 Chargeable Volume Sold	Total Chargeable Volume Sold to Date*	% of Avg. Annual ASQ Sold for 7 Years
103.0MM/year (sawlogs)	6.1MM	378.2MM	52
5.0MM/year (pulp/cedar prod)	6.4MM	64.7MM	185
108.0 MM/year (total)	13.0 MM	442.9 MM	59

* In fiscal years 1988-1994, which are the first 7 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 95-97 Avg. Annual Sell Required to Meet ASQ
1,030MM (sawlogs)	378.2MM	37	217.3MM/year
50MM (pulp/cedar prod)	64.7MM	117[1]	None

* In fiscal years 1988-1994, which are the first 7 years of the decade covered under the Forest Plan.

Evaluation of Monitoring Results

In order to meet the total decadal ASQ ceiling of 1,080 MM, the Forest must offer 637.1 MM (an average of 212.3 MMBF/year) during the last 3 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 yields were overestimated in the Forest Plan. Taken together, these factors indicate that selling the full first decade ASQ will not occur.

Item 1h-2:	**Financed Volume Offered Attainment by Components**
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
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 1988-1994

	Volume (MMBF)						
	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
Assigned Target	103.0	108.0	104.0	100.0	77.0	66.0	53.0
Accomplishment (Volume Offered)[1]	104.6	107.7	84.5	86.9	49.8	34.5	10.3
% of Accomplishment	102	99	81	87	65	52	20

[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 an average of 87.2 MMBF/year during the first 7 years of the decade. Actual accomplishment was 68.3 MMBF/year (78 percent of assigned timber target).

In FY 94, the Forest fell short of meeting its financed timber target by 42.7 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

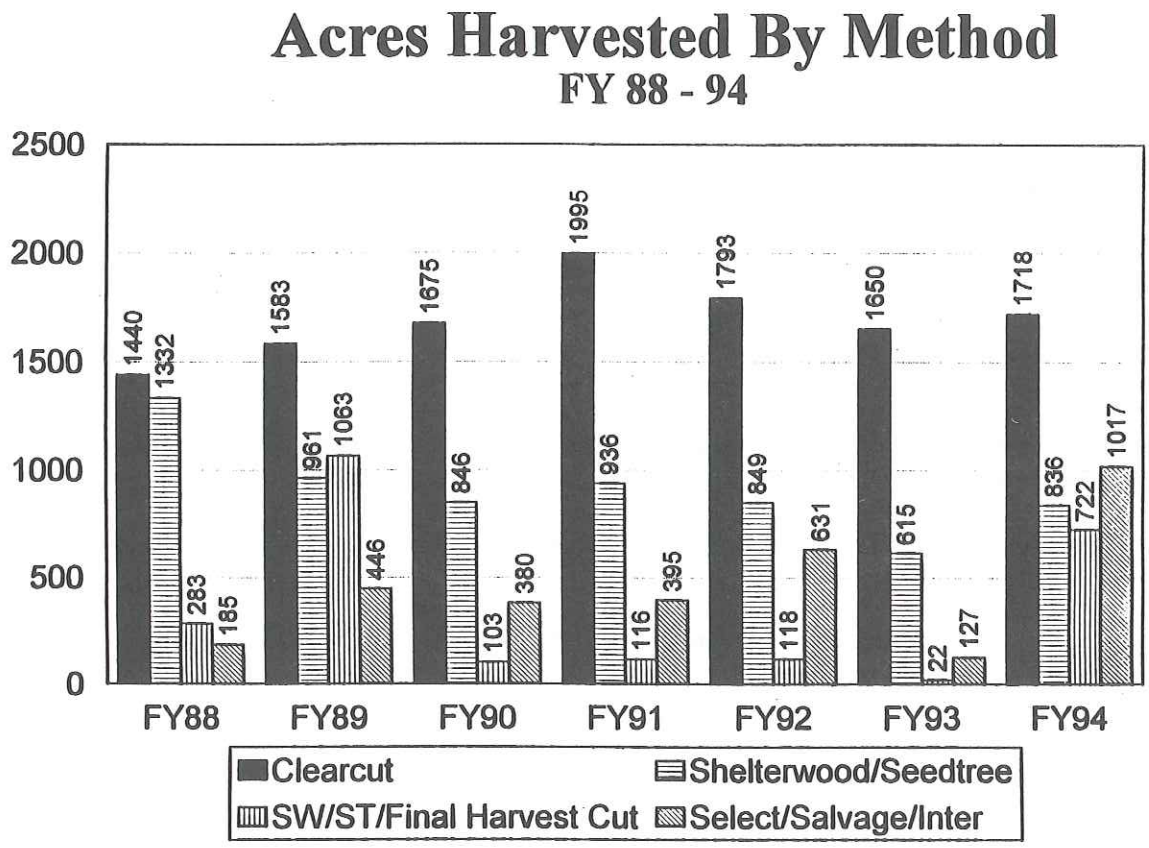
Due to reductions in timber and timber-related funding, future financed "timber targets" are not expected to increase. The FY 95 financed "timber target" on the Nez Perce is 50 MMBF. For the period FY 95-97, the Forest expects timber funding sufficient to offer between 30-50 MMBF per year.

Item 1i:	**Acres Timber Harvested by Method (Includes Precommercial Thinning)**
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	Unacceptable results of an interdisciplinary review.

Monitoring Results:

Precommercial thinning occurred on 854 acres which is approximately 89 percent of planned accomplishments. Harvesting took place on 4,293 acres (40 percent clearcut, 19 percent seed and prep cut from shelterwood and seed tree, 21 percent salvage, and 20 percent from other cutting methods). It should be noted that harvest acres represent the acres actually harvested in FY 94, 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 1989. The volume under contract has been going down for the past 3-4 years. As of the end of FY 94, there was 75 MMBF under contract.



Evaluation of Monitoring Results:

In the past, when the Forest had more than one year's worth of harvest volume under contract, the harvest acres were reflective of market conditions. In FY95, with less than one year's worth of volume under contract (based on 85 MM harvest average over the last 5 years), we expect harvest acres to be less.

Item 2f:	Vegetative Response to Treatments
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
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 treatments. An important function is to assess the accuracy of managed stand yield tables in forest planning models. These yield tables were built using Prognosis (now called Forest Vegetation Simulator - FVS), a growth simulation model.

Since 1979, sixty permanent plots have been established. Most have been installed in regenerated stands following clearcut or shelterwood harvest. Many have been thinned to stocking levels consistent with stocking levels in Plan yield tables. A few were installed in medium-tree stands (age 50-70) which have been commercially thinned (all growth plots are comprised of clusters which represent untreated and treated conditions).

Twelve permanent plot stands were remeasured in 1994. Some 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 manged stands is underway.

Evaluation of Monitoring Results:

1994 remeasurements will be sorted by age class and productivity class groups and combined with like groups from previous remeasurements. This work is ongoing and should be completed when managed stand yield tables are needed for Plan revision. However, FVS projections appear to be reasonably close to measured growth for the stands analyzed so far. Following are results of comparing seven 20 year old stands which were remeasured in 1993 at age thirty:

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

BA = basal area in square feet/acre
HT = average tree height
CF = volume in cubic feet/acre
BF = volume in board feet/acre

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, 1993 - September 30, 1994)
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 (12/9/94), reforestation index report, and reforestation status (12/9/94) report.

Monitoring Results:

Ninety-one percent of the acres planted in the past 5 years are progressing toward satisfactory stocking (are stocked). Replants are scheduled on the acres (9 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, 1993 - September 30, 1994)
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 are 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 likely be considered as unsuitable in the future during the Forest Plan revision process.

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, and therefore would likely be considered unsuitable, in the future plan revision.

■·■·■·Timber·■·■·■

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 re-evaluated in the revised forest plan. New proposed planning regulations have been published in the Federal Register. These should provide additional direction on this issue. This process could revise the specific criteria for describing tentatively suitable forest lands.

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, 1993 - September 30, 1994)
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 1994, are as follows:

ACRES	METHOD	REASON
48	Clearcut with reserves	Harvest high risk
63	Clearcut with reserves	Dead and Dying LLP
53	Clearcut with reserves	Dead and Dying LLP
73	Clearcut with reserves	Dead and Dying LLP
44	Clearcut with reserves	Dead and Dying LLP
47	Seed tree	Dead and Dying LLP
42	Clearcut with reserves	Dead and Dying LLP
43	Seed tree	Dead and Dying LLP
149	Salvage	Fire Salvage
346	Salvage	Fire Salvage
62	Salvage	Fire Salvage
201	Salvage	Fire Salvage
494	Salvage	Fire Salvage
45	Salvage	Fire Salvage

ACRES	METHOD	REASON
79	Salvage	Fire Salvage
127	Salvage	Fire Salvage

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 88-94)
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
Reporting Period:	2 to 6 years (FY 1988 to 1994)
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 88-94 data taken from sold sales during this period. Sales contained in the actual FY 88-94 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)	FY 94 Vol/Acre (MBF)	Weighted Avg.* FY 88-94 (MBF)
Clearcut(Units)	32.5	24.5	24.1	19.7	24.9	15.9	16.8	none sold	23.1
Clearcut(Rd ROW)	32.5	29.4	16.4	17.8	19.0	none sold	24.0	none sold	21.0
SW Prep Cut[1]	none planned	19.3	none sold	5.3	none sold	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	none sold	14.8
SW/ST Final Cut[3]	5.0	5.6	8.4	7.3	5.9	none sold	4.7	13.6	6.6
Sanitation/Salvage	none planned	8.9	11.1	2.5	4.1	1.8	9.7	1.7	4.7
Commercial Thin	5.9	none sold	none sold	2.5	12.2	none sold	none sold	4.3	7.7
Selection Cut[4]	12.6	4.6	none sold	12.8	none sold	8.0	11.9	none sold	6.9
Weighted Average	22.6	16.3	20.6	15.7	17.3	3.5	10.7	6.0	15.8

*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.%	FY 94 Distrib.%	Weighted Avg.* FY 88-94 Distrib.%
Clearcut(Units)	36	40	61	51	35	9	10	none sold	38
Clearcut(RdROW)	inc above	3	4	5	9	none sold	3	none sold	5
SW Prep Cut[1]	none planned	<1	none sold	2	none sold	none sold	none sold	none sold	>1
SW/ST Seed Cut[2]	56	24	22	23	37	none sold	46	none sold	29
SW/ST Final Cut[3]	3	29	6	10	11	none sold	20	36	18
Sanitation/ Salvage	none planned	1	1	7	7	84	19	61	9
Commercial Thin	2	none sold	none sold	1	1	none sold	none sold	4	1
Selection Cut[4]	3	3	none sold	1	none sold	7	2	none sold	1
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100

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

Silvicultural System	Forest Plan Scheduled 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	FY 94 Acres Sold	Average FY88-94 Acres/Year
Clearcut(Units)	1,710	2,607	1,989	2,146	1,923	15	284	none sold	1,281
Clearcut(RdROW)	inc.above	239	144	191	503	none sold	87	none sold	166
SW Prep Cut[1]	none planned	3	none sold	69	none sold	none sold	none sold	none sold	10
SW/ST Seed Cut[2]	2,705	1,549	731	990	2,029	none sold	1384	none sold	955
SW/ST Final Cut[3]	130	1,921	374	455	602	none sold	608	355	616
Sanitation/ Salvage	none planned	52	23	317	386	145	574	606	300
Commercial Thin	100	none sold	none sold	34	67	none sold	none sold	38	20
Selection Cut[4]	125	189	none sold	31	none sold	12	45	none sold	40
Totals	4,770	6,560	3,261	4,233	5,510	172	2,982	999	3,388

[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)

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	FY 94 Ac.Sold	Average FY88-94 Acres/ Year
10	Riparian	180		139	103	176		38	1	65
12	Timber	2,543	5,083	2,374	3,305	3,501	160	1,792	621	2,405
13	Aggreg(12/17)	75								NA
14	Aggreg(12/16/17)	60								NA
15	Aggreg(12/16)	702								NA
16	Elk/Deer Winter Range	500	1,245	509	150	1,424	---	404	359	585
17	Visual/Scenic	388	71	173	647	409	12	---	---	187
18	Aggreg(16/17)	197								NA
20	Old Growth	none planned	35	22	--	--	--	713	--	128
21	Moose Winter Range	110	126	44	28	--	--	35	18	36
23	Municipal Water-sheds	15	---	---	---	---	---	---	---	0
	TOTALS	4,770	6,560	3,261	4,233	5,510	172	2,982	999	3,388

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. Sold acres reflect this breakdown.

Evaluation of Monitoring Results:

From the actual data for sold sales in FY 88-94, the following trends can be identified:

- Actual net cruised volume/acre (all silviculture systems) on sold sales continues to be less (30 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 FY88-94 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 88-94 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 88-94 sold acres are 29 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 88-94 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 7 years of Forest Plan implementation, the Forest sold less volume in inventoried roadless areas than the decadal Forest Plan projection.

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	75
1994	4.9	359
Total	53.4	2,726

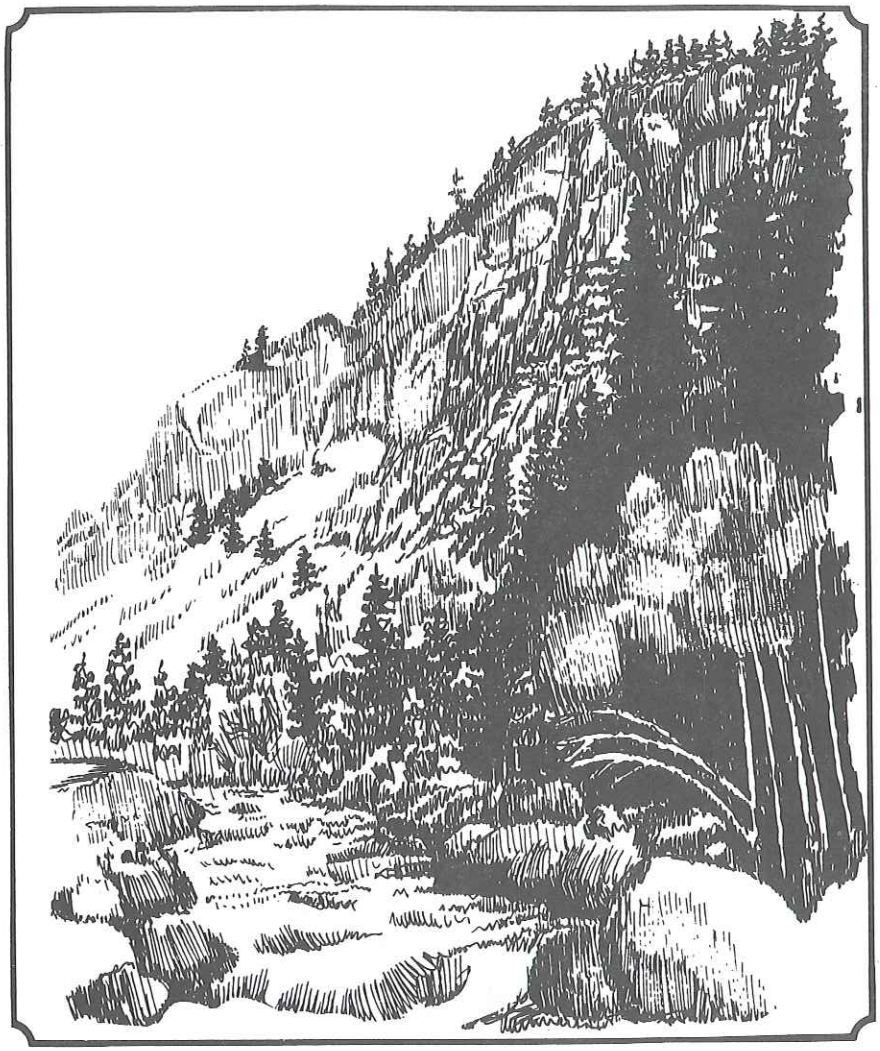
Roadless Volume and Acres as a Percentage of Total Sold

Total Chargeable Volume Sold MMBF (FY 88-94)	Actual Roadless Volume Percent-age	Total Sold Acres Included in Cutting Unit Road Right-of-Way, FY 88-94	Actual Roadless Acres Percent-age	Forest Plan Decadal Roadless Sell Estimate (%)
442.9	12	23,717	11	30

Roadless Acres Sold by Roadless Area

Number	Name	District	Sold Acres	Percent of Total Roadless Sold Acres
1894	Silver Creek-Pilot Knob	Clearwater	75	3
1921	Gospel Hump (Jersey-Jack)	Red River	833	31
1851	Little Slate Creek	Salmon River	667	24
1235	Dixie Summit - Nut Hill	Red River	402	15
1855	Salmon Face	Salmon River	174	6
1844	Clear Creek	Clearwater	150	6
1852	John Day	Salmon River	66	2
1841	Rackliff-Gedney	Selway	359	13
	Total		2,726	100

Soil & Water



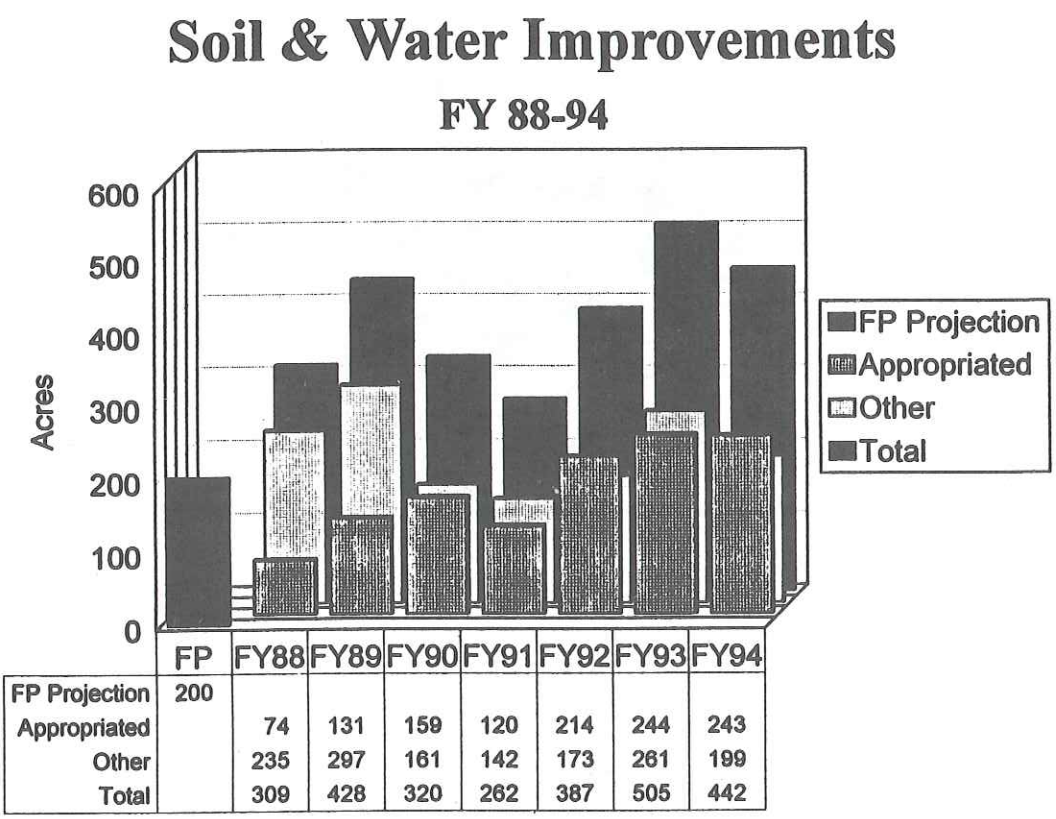
Item 1j:	Soil and Water Rehabilitation and Improvements
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	If the Forest did not achieve its assigned target for the fiscal year.

Monitoring Results:

Implementation Monitoring: The assigned targets for soil and water improvements using appropriated funds in Fiscal Year 1994 were 251 acres. The Forest Plan goal is 200 acres per year.

SOIL AND WATER IMPROVEMENTS ACCOMPLISHED IN FISCAL YEARS 1988 - 1994

	Acres Improved						
Funding Source	1988	1989	1990	1991	1992	1993	1994
Appropriated Soil and Water	74	131	159	120	214	244	243
Knutsen-Vandenburg Act (KV)	52	93	82	85	79	108	79
Road Maintenance	113	57	76	25	82	90	77
Other Funding Sources	70	147	3	32	12	63	43
TOTAL	309	428	320	262	387	505	442



	FP	FY88	FY89	FY90	FY91	FY92	FY93	FY94
FP Projection	200							
Appropriated		74	131	159	120	214	244	243
Other		235	297	161	142	173	261	199
Total		309	428	320	262	387	505	442

Effectiveness Monitoring: Revegetation and stabilization of road cut/fill slopes using a variety of native plant species was initiated in 1993 and monitored in 1994 for survival. Thirty-five different sites were planted and overall survival was 49 percent.

Evaluation of Monitoring Results:

Over the past seven years (1988-1994) the Nez Perce National Forest has exceeded the Forest Plan target of 200 acres for soil and water improvements. This trend has continued through 1994 by accomplishing 243 acres with appropriated soil and water improvement funds and 199 acres through other funds.

The cut and fill bank revegetation test project is regarded as successful in that it met some of the objectives. The 1994 monitoring of the project provides valuable information that may be used for future revegetation projects. The information gathered from monitoring should allow the Forest to identify those sites that show potential for further rehabilitation efforts. Long term monitoring should show if the remaining objectives can successfully be met.

Future projects will be designed to focus on those species that survived within determined physical limitations such as soil type, aspect, elevation and slope gradiant. The 1994 monitoring data will provide the information needed to design such projects.

While the road cut bank rehabilitation project was being implemented, several important factors were revealed. One significant factor was that these types of projects are occurring presently over a wide area of disciplines, and information from such projects can be used to improve project design. Caution should be used when drawing conclusions from one study and applying them to other projects. As an example, *Symphoriocarpus albus* (common snowberry) was planted in a placer-mined site on the Bonners Ferry Ranger District of the Idaho Panhandle National Forests and showed a low percentage of survival in comparison to other species planted. The same species used in the project described above has shown a high percentage of survival in comparison to other species planted. The lesson learned may be that small numbers need to be planted at first, the results monitored, and then incorporated into full scale rehabilitation efforts.

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 2g:	Impacts of Management Activities on Soils
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
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.

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 1994 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 warrented and underway.

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

- The forest seed mix is ineffective on certain geologic types and in certain high elevation or dry climates. Heightened emphasis on site specific revegetation measures continues to be warrented.

Effectiveness Monitoring: Qualitative effectiveness monitoring was conducted on selected wildfires and timber sales. Results indicate :

- Machine excavated or hand firelines installed during fire suppression may create areas of raw exposed substrate that are a potential source of sediment into a stream or may be difficult to stabilize and return to prefire levels of productivity, expecially firelines constructed in shallow or rocky soils, on steep slopes, and in harsh high elevation climates. Narrower hand lines with back burning are preferable to machine excavated lines where feasible. Rapid stabilization after the fire is controlled has proven difficult where heavy machinery and experienced operators, or native seed, are not available in a timely manner. Hand labor on the most fragile sites is recommended to ensure more timely treatment. Development of a native seed bank for restoration projects is being planned.

- Timber harvest to recover value of fire killed trees is being better designed to protect soil, riparian, and wildlife resources. Minimizing road construction, use of helicopter logging systems, and leaving more dead trees of all species and size classes provides for less soil compaction, displacement and erosion, longer snag retention, more large organic debris to provide microsites for nitrogen fixation, better microsite moisture retention and more foraging substrate and cover for small animals. More quantitative evaluation of harvest systems and leave tree prescriptions is needed to understand effects on long-term soil productivity, and snag dependent wildlife habitat. Adequate leave tree marking in riparian areas and on unstable slopes continues to need heightened emphasis for slope stability protection, as does recognition of unstable slopes.

- Monitoring of proposed timber sales identified numerous opportunities to adjust marking to better provide for slope stability to better protect chinook salmon habitat. In these areas, harvest boundaries were adjusted to avoid unstable slopes, or more live trees were left to maintain deep rooted vegetation on the slopes.

Validation Monitoring: Two validation monitoring projects were initiated on the Forest in 1994, and another was resampled.

A region wide sampling program designed to map existing vegetation across the Region using spectral imagery included sampling on the Forest. Sampling in 1994 focused on existing plant community composition and structure in managed and natural landscapes. Sampling described vegetation and site attributes. Over 900 new plots were sampled and over 1000 existing plots were used from the Forest in assisting the classification.

Fire monitoring plots were established in the burned area of the Rapid River Fire. These will be used to evaluate recovery of ground cover, changes in fuels, and snag fall over the next several years.

A 1988 wilderness fire was resampled for plant community development, ground cover, fuels and snag fall in 1994. Immediately after the fire severely burned areas showed 70 percent bare soil and ash. The remainder was charred wood, gravel and rock. By 1994, litter, moss, and basal vegetation covered 70 percent of the soil; shrub, grass, and forb canopy cover ranged from 60 to 90 percent. Tree seedlings were becoming established. Six years after the fire 8 percent of the standing trees killed in the fire or dead before the fire are fallen. Subalpine fir, Engelmann spruce, and grand fir appear more likely to fall in the early post fire years compared to lodgepole pine or Douglas-fir. Ninety percent of the fallen trees are less than 17 inches in diameter, but this is similar to the proportion of small trees in the total sample.

Monitoring Evaluation

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.

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 implemented 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. These sales appear to maintain future options. The need to complete landscape level assessment remains high. These assessments will help us to generate new information and issues, which will drive more comprehensive restoration initiatives and identify additional vegetative management opportunities.

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, 1993 to September 30, 1994
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: As in previous years, the Forest collected streamflow and water quality data at eight gaging 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.

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 and workload prioritization, no report was issued during FY94. The reports for Water Years 1992, 1993, and 1994 will be issued as time permits.

Evaluation of Monitoring Results:

Analysis of sediment yield data from the gaged water quality monitoring stations is ongoing. An analysis comparing measured versus modeled sediment yield at the eight gaging stations was completed in 1994. This effort is summarized in Item 11.

Item 2i:	Water Quality: Project Level Administrative Reviews and Field Studies
Frequency of Measurement:	Annually
Reporting Period:	October 1, 1993 - September 30, 1994
Variability Which Would Initiate Further Evaluation:	If the reviews or studies discover violations of Forest Plan standards or Idaho Water Quality Standards.

Forest Plan implementation monitoring of road construction and reconstruction, timber harvest, mining and range activities were conducted in 1994. 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:

- Scott Fire Salvage
- Riparian Grazing - Mallard Creek
- Selway Fire Salvage
- Stream Improvements

Monitoring Results:

Implementation Monitoring: 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 that were applicable to the project and evaluated in the reviews. 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, two minor departures from the Rules 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 continued to improve over previous years. This is particularly true with respect to riparian management prescriptions and implementation. Due to the heightened emphasis on fish habitat protection and restoration and the implementation of PACFISH, generally higher levels of protection than in the past will be applied to ongoing and proposed projects.

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. Some problem areas continue to exist, however.

Item 2j:	Impacts of Management Activities on Riparian Areas
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
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 implementation monitoring reviews occurred on two fire salvage timber sales. Implementation monitoring continued on proposed activities with the potential to affect Snake River chinook salmon habitat. Riparian harvest prescriptions were adjusted or unit boundaries adjusted to better protect streambank and slope stability, shade, potential for woody debris recruitment, and to reduce erosion risk.

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.

Effectiveness monitoring was carried out as part of the review of proposed Forest activities that have the potential to affect anadromous fisheries habitat. Proposed harvest units were screened for occurrence on sensitive land types. Those identified during the screening process were reviewed on site to evaluate risk and adjust harvest prescriptions.

Range riparian monitoring was conducted on active allotments to monitor levels of utilization and stubble height in streamside zones, and assess streambank stability. Stream substrate composition was monitored in selected reaches.

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 is being used to identify sensitive stream types to identify areas most likely sensitive to livestock impacts.

Preliminary data was used to describe fire regimes in riparian areas.

Monitoring Results:

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

Monitoring on two salvage sales suggests that the environmental documents provide adequate direction for protection of riparian resources. More emphasis is needed to assure that riparian resource protection measures are effectively translated to marking guidelines and on the ground implementation. Marking guidelines should consider the fact that trees that die between the time of marking and harvest will likely be harvested, leaving fewer snags or live trees than anticipated. Leave tree marking in riparian zones of ephemeral and intermittent streams should be frequently reviewed to assure that the riparian protection objectives in the environmental assessment are effectively translated on the ground.

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".

District sale administrators, fisheries biologists, silviculturists, and hydrologists have examined and modified harvest unit boundaries and leave tree marking to better protect riparian dependent resources in sales that have not yet been harvested.

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

Validation Monitoring: The riparian classification project made no progress in 1994 because of funding constraints. The objectives were to describe the stream systems, soils and vegetation of these areas, their equilibrium states, and response to disturbance. Renewed emphasis on characterization of valley bottoms and streams in a climatic and geomorphic setting is needed. The Upper Columbia River Basin assessment is likely to make this point more strongly.

Analysis of riparian classification data in 1994 addressed riparian timber stand structure, and relationship to disturbance history, at sample reach scale. Fire is a primary disturbance agent in riparian stands, especially narrow riparian areas in headwater drainages. These streamside zones tend to show fire severity similar to adjacent uplands, but may burn less frequently. Upland and riparian fire provides for significant pulses of debris recruitment to streams, and fluxes in water yields and channel forming processes. Broad valley bottoms in large canyons in moist climates have the greatest temporal stability: severe fires are very infrequent. When they occur, large severe fires in these settings can result in major alterations of fluvial landforms and stream habitat in these settings.

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 conserva-

tion strategy, we need to synthesize available research and carry out necessary investigations to describe aquatic habitat and community structure, and agents and rates of spatial and temporal change.

Effective implementation of riparian direction in environmental documents needs heightened emphasis. Better communication of riparian objectives and clearer guidelines for boundary delineation and leave tree marking are needed.

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. 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.

Item 11:	Validation of Resource Prediction Models: Water Quality and Fish:
Frequency of Measurement:	Annually
Reporting Period:	2 to 5 years (FY 1989 to 1994)
Variability Which Would Initiate Further Evaluation:	If validation efforts show a need for changes to existing predictive models.

Sediment Yield Model Tests: Continued evaluation of the Forests sediment yield model was completed through a University of Idaho master's thesis, titled "Evaluation of the NEZSED Sediment Yield Model Using Data from Forested Watersheds in North-Central Idaho" (Gloss, 1995). A summary of the project is presented below.

The "Guide for Predicting Sediment Yields From Forested Watersheds" (Cline et al, 1981), developed by the USDA Forest Service Regions 1 and 4 (referred to as the R1/R4 Guide), is commonly used as a tool to predict cumulative sediment yield effects of road construction, timber harvest and fire. This study evaluated NEZSED, a sediment yield model the Nez Perce National Forest has adapted to local conditions from these guidelines.

OBJECTIVES

The purpose of this study was to evaluate the NEZSED model as a tool for predicting the cumulative effects of land management activities on sediment yield. Specific objectives of the study were to:

1) Determine if average annual sediment yields computed from field data are of sufficient quality to be used for evaluation of modeled sediment yields.

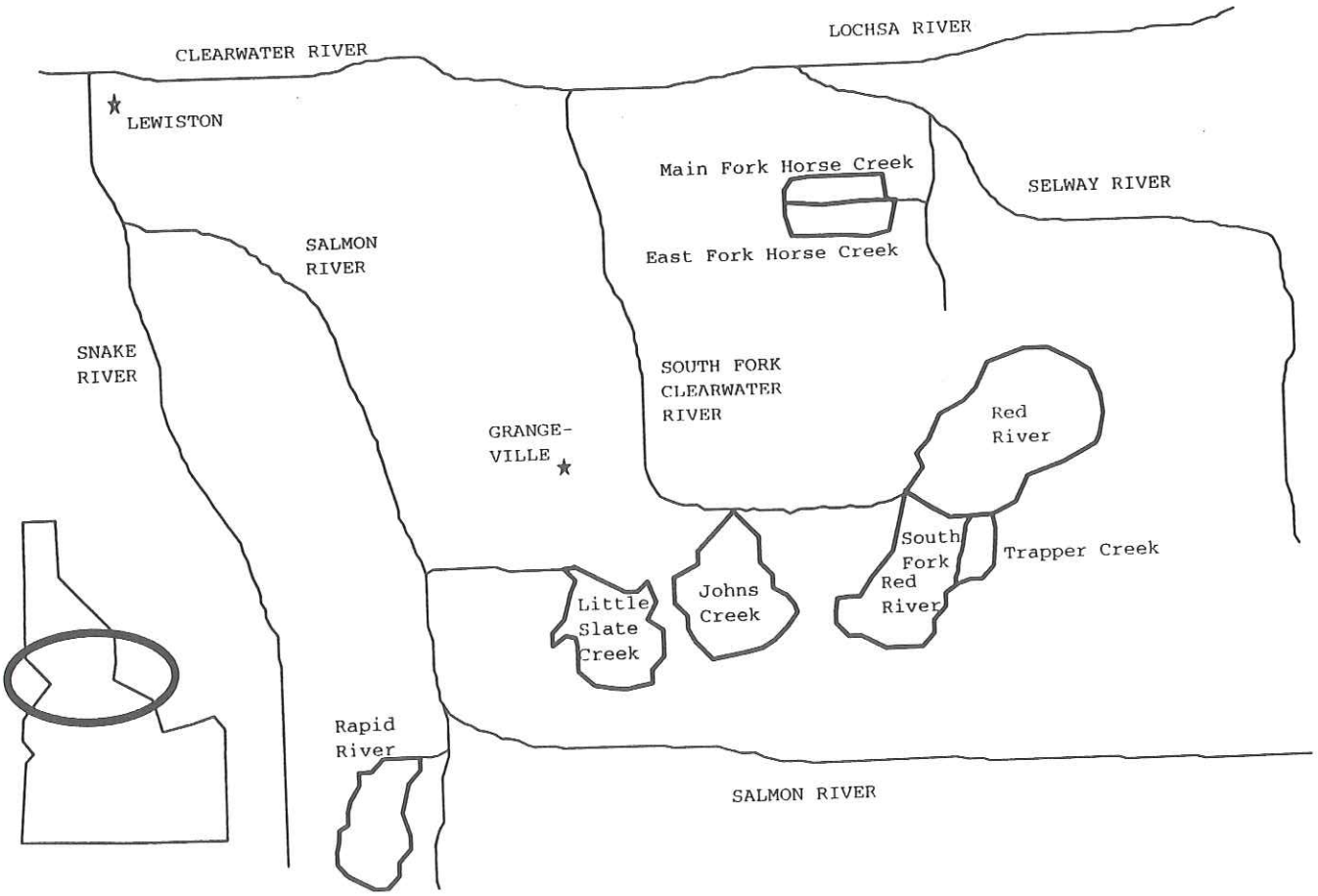
2) Determine if average annual sediment yields predicted by NEZSED are comparable to average annual sediment yields computed from field data.

3) Determine if modifications can be made to coefficients within the existing structure of NEZSED to improve average annual sediment yield predictions.

STUDY AREA

Observed and predicted average annual sediment yields were compared for eight watersheds on the Forest (See Figure 1). Watersheds range in size from 6 to 113 square miles. Elevations vary from 2140 to 9393 feet. Mean annual basin precipitation ranges from 34 to 46 inches. Hydrology is dominated by snowmelt, with approximately two-thirds of the annual precipitation occurring as snowfall between November and April. Geology is dominated by metamorphosed gneiss and schist of the Belt Supergroup (border zone materials of the Idaho Batholith), granitics of the Idaho Batholith, and metamorphosed volcanic and sedimentary rocks of the Seven Devils Formation. Land uses within these watersheds include varying degrees of roading, timber harvest, mining and grazing, including some essentially undeveloped drainages.

FIGURE 1: Study Location Map



METHODS

Annual sediment yields were computed from two sources of total sediment discharge monitoring data and predicted with the NEZSED sediment yield model from 1986 to 1993. The first data set includes six watersheds and will be referred to as "gaging stations" and the second data set contains two watersheds and will be referred to as "sediment retention dams." At the gaging stations, suspended sediment was sampled using automated pumping samplers during spring runoff and periodic depth-integrated sampling. Bedload was periodically sampled using a Helley-Smith sampler. Discharge was measured using water level recorders. Suspended sediment discharge was determined from sampled mean daily suspended sediment concentrations or from rating curves for periods without actual samples. Bedload discharge was calculated from rating curves. Daily suspended and bedload discharges were computed and summed to determine annual sediment yield. At the sediment retention dams, bedload and some portion of suspended sediment are collected in instream sediment retention dams. Annual sediment yield was determined from sediment collected in the retention dams and suspended sediment passing through the dams. Average annual sediment yields were modeled based on established guidelines for the NEZSED model.

RESULTS

Table 1 displays descriptive statistics of observed sediment yields for individual watersheds. Observed and predicted sediment yields, averaged for the period of record, are shown in Table 2, expressed in tons per square mile per year. Figure 2 displays the same information graphically with vertical deviations from the line of perfect fit as an indication of goodness of fit. In general, results for both gaging stations and sediment retention dams deviate from the perfect fit line. NEZSED under-predicted average annual sediment yields for all gaging stations and over-predicted average annual sediment yields for both sediment retention dams. Additionally, as the observed sediment yields increase, predicted sediment yields tend to decrease.

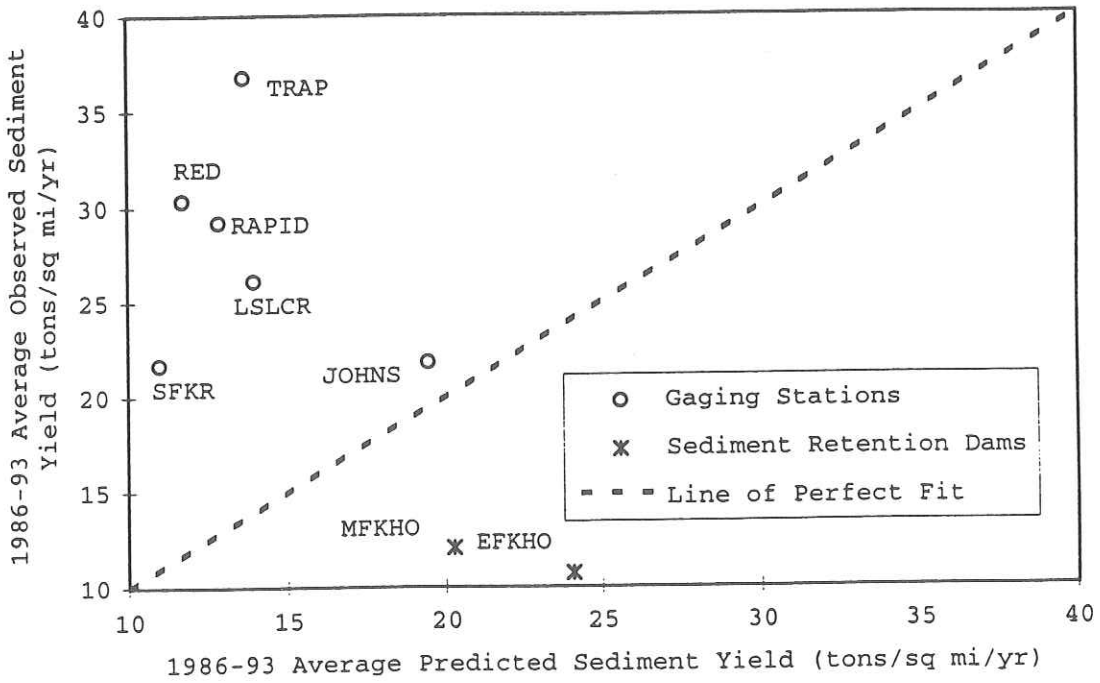
TABLE 1: Observed Annual Sediment Yields (tons/mi²/yr)

Descriptive Statistics	TRAP	SFKR	RED	LSLCR	RAPID	JOHNS	EFKHO	MFKHO
Arithmetic Mean	36.8	21.7	30.3	26.1	29.2	21.8	10.7	12.0
Standard Error	7.9	4.0	7.0	10.0	14.2	12.2	1.4	0.9
Median	33.1	19.1	28.2	10.6	10.5	8.7	9.8	11.5
Std. Deviation	22.2	11.2	19.6	28.3	40.2	34.6	3.9	2.6
Range	66.0	30.6	58.7	78.7	106.2	102.2	11.9	7.4
Minimum	12.3	6.3	8.5	5.0	2.9	3.3	6.8	8.3
Maximum	78.3	36.9	67.2	84.0	109.1	105.4	18.7	15.7
Count (years)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0

TABLE 2: Observed & Predicted Average Annual Sediment Yields(tons/mi²/yr)

Data Set	TRAP	SFKR	RED	LSLCR	RAPID	JOHNS	EFKHO	MFKHO
Observed	36.78	21.67	30.33	26.10	29.18	21.82	10.37	11.52
Predicted	13.64	10.98	11.73	13.95	12.86	19.45	24.08	21.04

FIGURE 2: Observed & Predicted Average Annual Sediment Yields(ton's/mi²/yr)



CONCLUSIONS

1. Differences were found between predicted and observed sediment yields. When compared to observed data from six gaging stations and two sediment retention dams, predicted average annual sediment yields had mean absolute errors of 13.8 (48%) and 10.5 (104%) tons per square mile per year, respectively.

2. Predicted sediment yields both over and underestimated observed sediment yields. Predicted average annual sediment yields, based on the NEZSED model, were significantly less than those

2. Predicted sediment yields both over and underestimated observed sediment yields. Predicted average annual sediment yields, based on the NEZSED model, were significantly less than those observed for gaging stations ($p < 0.005$) and significantly more than those observed for sediment retention dams ($p < 0.10$).

3. Overall, observed and predicted unit area average annual sediment yields (tons/sq mi/yr) were inversely related. Predicted and observed average annual sediment yields from gaging stations and sediment retention dams had modeling efficiencies of -7.57 and -129 respectively, indicating that the mean observed sediment yields represents the data sets better than the predicted sediment yields.

4. Observed annual sediment yields are considered reasonable estimates, in both magnitude and proportion of suspended and bedload sediment, of the true sediment yields for the watersheds studied. But, because these annual sediment yields are estimates, they contribute to the differences found between predicted and observed sediment yields.

5. Changes in the routing relationship, natural sediment rates and road related model factors generally have the greatest influence on predicted average annual sediment yields.

6. Improvements in model results are mathematically possible and logical, but a systematic rationale was not found to support model modifications necessary to obtain these improvements.

Conclusions presented above are based on the application of NEZSED to eight forested watersheds in north-central Idaho. While the watersheds evaluated represent a wide range of natural and management related conditions, application of the results and conclusions of this analysis to other watersheds or models should be done with caution. Similar results and conclusions may be expected in other watersheds or with other sediment yield models, that are based on the same procedures as NEZSED, but further evaluations are necessary.

This study supports previous research indicating that highly accurate sediment yield estimates cannot be expected using the NEZSED model, although differences between observed and predicted sediment yields are believed to be similar to other models which simulate sediment yield processes. Potentially more important to model users than the errors associated with the prediction of quantified estimates of sediment yield, is the inverse relationship found between predicted and observed average annual sediment yields.

The current status of sediment yield modeling and the use of NEZSED as a tool to assess land management activities should be considered when interpreting the results of this study. Modeling sedimentation processes "is in the developmental stages: it is not a true representation, but at best an approximation of the solution to a problem" (Fan, 1988, p.23). Literature reviewed for this study did not reveal any other more accurate sediment yield models which have the capability to assess alternative forest land use practices, suggesting models based on the R1/R4 Guide may be the best available technology. Nevertheless, uncertainties associated with NEZSED highlight the fact that professional judgement is the most important component for successful model application, and show the need for continued efforts to improve our ability to provide quantitative information on sedimentation processes.

RECOMMENDATIONS

Continued development of the NEZSED model and improvements in the reliability of observed sediment yield estimates are needed to improve future land management decisions. This study and others cited in the study show that significant differences exist between predicted and sediment yields based on the model, and sediment yields computed from field data. This reduces the model's utility as a tool in the decision making process. Suggestions for improvements in the sediment monitoring program and NEZSED model follow.

1. Sediment Monitoring

   (a) Sediment monitoring programs should be based on a statistically valid sampling program designed to estimate the errors associated with computed annual sediment yields.

   (b) Efforts should continue to increase the frequency of instantaneous discharge, suspended and bedload sediment measurements during periods of high discharge.

   (c) Variations in daily suspended sediment concentrations should be quantified, and depth-proportional intakes could be used to reduce the uncertainty associated with automated pumping sampler data.

   (d) Improved estimates of sediment trap efficiency are needed. Effort should focus on the discharge, suspended sediment relationship. Also bulk density measurements in the sediment retention dams would improve trap efficiencies.

2. NEZSED Model Improvements

   (a) Additional studies of the NEZSED model and others based on the R1/R4 Guide are needed to verify the conclusions presented in this study.

   (b) Improved and more site-specific estimates of road mitigation factors should be included in future applications of the model.

   (c) Model improvements within the existing structure of NEZSED, should focus on sediment routing, natural sediment rates, and road-related erosion factors.

   (d) Additional sources of sediment should be included in the prediction of sediment yields. Efforts should focus on sediment due to alterations of natural stream channels, grazing, mining, and mass erosion.

Range

Item 1g:	Animal Unit Months Grazing Permits
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	+/- 10% of Forest Plan Estimate

Monitoring Results:

The Forest permitted 30,700 animal unit months (AUMs) for 1994. The Forest authorized through the yearly billing process 28,900 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 15% less than the current permitted levels.

Item 1l:	Range Analysis and Allotment Management Plan Updates
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	+/- 10% of Forest Plan Estimate

Discussion:

During FY 94 range management program included gathering resource data for planned allotment 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 on three allotments scheduled for AMP revisions in 1994 was delayed due to continued work on completing consultation with National Marine Fisheries Service. 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.

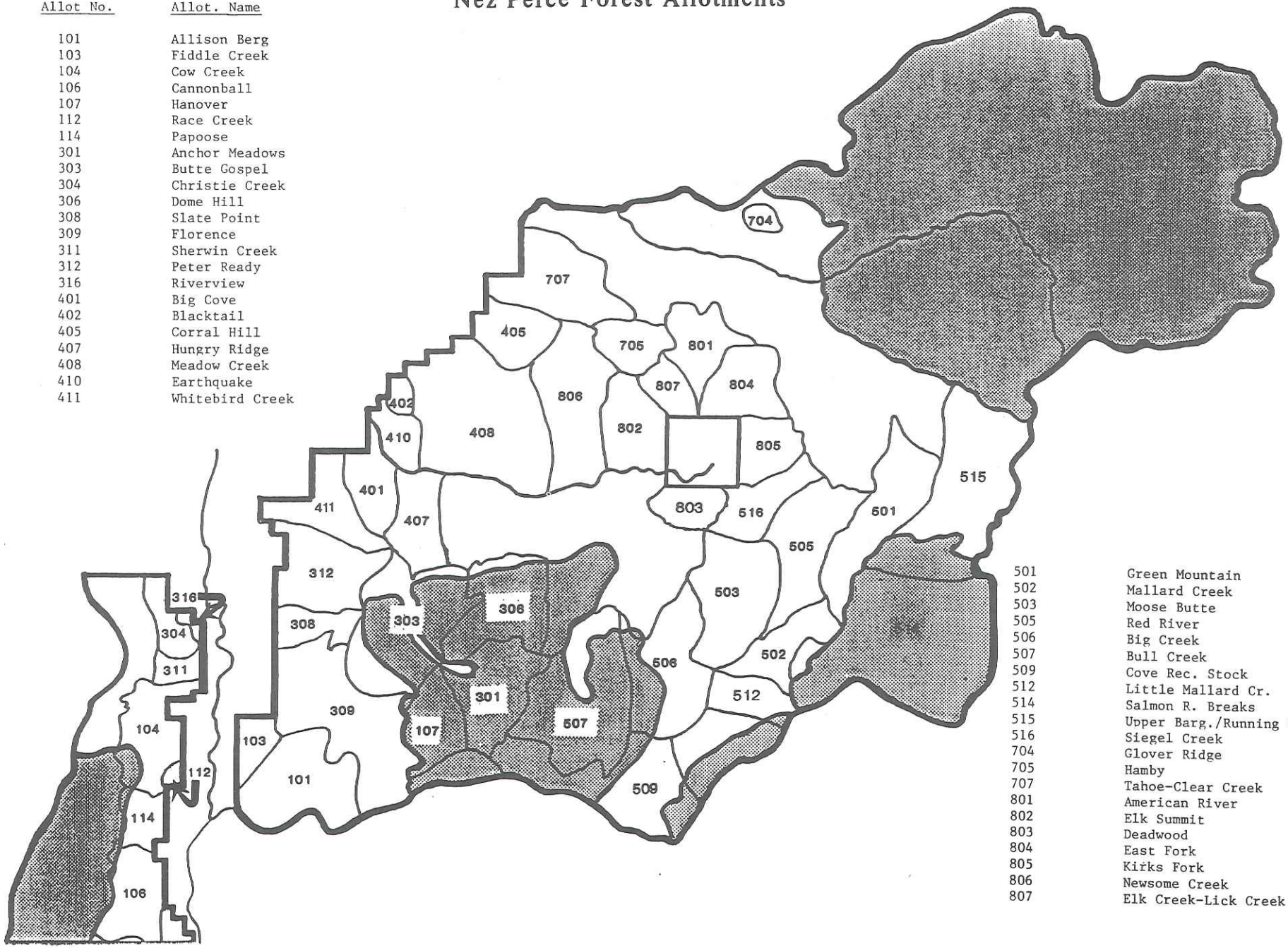
Allotment Management Plan (AMP) Update Schedule

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	1995	Riparian
Hungry Ridge	Being Revised	1995	Riparian/Wildlife
Sherwin Creek	Being Revised	1995	Timber/Riparian
Peter Ready	Needs Revision	1996	Timber/Veg.Succession
Riverview	Needs Revision	1996	Riparian
American River	Needs Revision	1996	Riparian
Hanover	Needs Revision	1996	Wilderness/Riparian
Butte Gospel	Needs Revision	1996	Wilderness/Riparian
Whitebird Creek	Needs Revision	1996	Vegetative Succession
Elk Cr.-Lick Cr.	Needs Revision	1997	Riparian
Allison-Berg	Needs Revision	1997	Timber Management
Mallard Creek	Needs Revision	1997	Riparian
Cow Creek	Needs Revision	1997	Wilderness/Timber Mgmt.
Meadow Creek	Needs Revision	1998	Big Game
Cannonball	Needs Revision	1998	Wilderness/Recreation
Corral Hill	Needs Revision	1998	Vegetative Succession
East Fork	Needs Revision	1998	Riparian
Papoose	Needs Revision	1999	Riparian
Newsome Creek	Needs Revision	1999	Timber Management
Green Mountain	Needs Revision	1999	Riparian/Big Game/T&E
Fiddle Creek	Needs Revision	1999	Timber Management
Tahoe-Clear Creek	Needs Revision	1999	Riparian/Timber Mgmt.
Earthquake	Needs Revision	2000	Riparian/Big Game
Elk Summit	Needs Revision	2000	Timber Management
Hamby	Needs Revision	2000	Timber Management
Kirks Fork	Needs Revision	2000	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

National direction emphasizes that all Forests are to prioritize allotments based on resource conditions. The preceding 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.

Evaluation of Monitoring Results:

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 the year 2000.

The Forest is bringing all allotments into compliance with Forest Plan standards and guidelines through the Term Grazing Permits. 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 analysis was delayed 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. Permittees were effective in resting Wind River Meadows and American River by herding livestock away from sensitive areas (completed without fences).

Grazing Standards

In 1994, the following grazing standards were incorporated into the Annual Operating Instructions for allotments within the Salmon River drainage. The grazing standards are intended to maintain desirable riparian conditions and achieve recovery of streams not in satisfactory condition. These grazing standards will be incorporated into the annual operating instructions for all allotments and implemented across the forest.

Forage Utilization: 30-40% of the current year's growth by weight, measured during the grazing period.

Shrub Utilization: 20-40% of the available current year's growth, measured as a percent of the leader length browse.

Bank Disturbance: 10% of the bank distance.

Stubble Height: 65% of the average ungrazed herbaceous plant height.

Monitoring suggests that, generally, permittees were successful in meeting the livestock standards stated in the annual operating instructions. At those locations where use/disturbance was approaching allowable standards, the permittee herded animals to less sensitive areas. Conditions requiring removal/rotation of livestock were documented on five allotments. Each time this occurred the permittees were notified and the livestock were promptly removed from the problem area. Below is a monitoring summary for five cattle allotments within the Salmon River drainage. The results are averages of the number of sites within the allotment. The table provides a general overview of the grazing intensity on the specified allotments.

GRAZING STANDARD MONITORING SUMMARY FOR FIVE CATTLE ALLOTMENTS

Allotments	Forage Utilization	Shrub Utilization	Bank Disturb-ance	Stubble Remaining
Hanover (5 sites)	25%	3%	13%	75%
Mallard (4 sites)	10%	10%	5%	95%
Christie Cr (15 sites)	43%	13%	6%	N/A
Peter Ready (6 sites)	35%	7%	7%	N/A
White Bird (27 sites)	20%	15%	N/A	N/A

There were monitoring sites where grazing exceeded the prescribed standards. On one allotment, a pasture will be rested in 1995 due to heavy grazing in 1994. The information collected during 1994 will be used to tailor site specific management strategies for 1995 and focus additional efforts by the permittee and Forest personnel.

Recreation

Item 1a:	Recreation Visitor Days
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
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.

Recreation

Discussion:

During the past several years, the Recreation Information Management (RIM) system has been in a state of flux pending implementation of the Infrastructure data base. 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 1988-1994

	Recreation Use (MRVD)[1]						
Activity Category	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
Camping, Picnicking, and Swimming	207.0	241.9	241.9	241.9	241.9	243.8	243.9
Mechanized Travel and Viewing Scenery	173.6	193.2	193.2	201.5	202.7	203.2	216.1
Hiking, Horseback Travel, and Water Travel	75.3	76.6	76.6	84.0	89.7	90.3	97.5
Winter Sports	10.0	10.4	10.4	13.3	13.4	14.1	14.1
Resorts, Cabins, and Organizational Camps	10.0	11.5	11.5	7.6	7.6	7.6	7.6
Hunting	88.9	91.4	91.4	91.4	95.2	95.4	109.8
Fishing	31.5	33.7	33.7	33.7	33.7	33.7	35.6
Non-Consumptive Fish and Wildlife Use	2.0	3.2	3.2	3.2	3.3	3.3	3.3
Other Recreational Activities	57.5	59.6	59.6	60.6	60.6	60.6	60.6
Total	655.8	722.5	722.5	737.2	748.1	752.1	788.5
Wilderness Use (included above)							
Gospel-Hump	21.5	21.5	21.5	21.5	21.5	21.7	21.7
Frank Church-River of No Return	10.0	10.0	10.0	10.0	22.0	22.1	22.2
Selway-Bitterroot	51.6	51.6	51.6	51.6	51.6	51.7	51.7
Total (included above)	83.1	83.1	83.1	83.1	95.1	95.5	95.6

[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 since then. Accuracy of RIM use estimates will improve only when gathering such information is given a priority. A National system called Infrastructure will being to be implemented in fiscal year 1995. 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, 1993 - September 30, 1994)
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 1994, 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. ROS also was mapped for the Upper Columbia Basin Assessment. This mapping was based on previous ROS information and was not completed to a level of accuracy that would be applicable at the project level.

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.

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 reductions and

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, 1993 - September 30, 1994)
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, motorcycles, 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, 1993 - September 30, 1994)
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 1994, 42 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, 3,429 acres were inventoried for cultural resources and 34 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
1994	42	3,429	34

In addition to the new sites recorded, 32 previously recorded sites were revisited. Of the 28 sites monitored, all 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
1994	28	0

In one non-inventoried (non-project related) area, vandalism/damage was observed.

Sourdough Lookout Restoration: In July 1994, the Nez Perce National Forest in cooperation with log building specialists began efforts to restore the 1927 Sourdough Peak Lookout, which is eligible for the National Register of Historic Places. The restoration of the unique log cabin with cupola style lookout was the focus of a Passport In Time (PIT) Project. PIT is part of a National Heritage Resource Program which provides opportunities for individuals to work with professional archaeologists and historians on projects involving historic or prehistoric resources.

Following a course of work approved by the State Historic Preservation Officer, volunteers at Sourdough Peak assisted with the preparation and placement of new wall logs, general clean-up of the lookout interior, scraping of old paint and applying a fresh coat to window shutters, sanding of the maple hardwood flooring, and the rebuilding of the rock and mortar foundation. Volunteers assisted with the recording of historic can and bottle dumps and trails associated with the historic lookout. This recording including mapping, sketching, and photographing and provided additional documentation for the permanent cultural resource site record form.

This PIT project and the generous help of all the volunteers has enabled us to fully document and stabilize this historic resource. Although the project was not completed in 1994, the Forest Service will return to the site in 1995 and complete the restoration work on Sourdough Peak Lookout.

Evaluation of Monitoring Results:

None of the 28 sites monitored were impacted. Monitoring of the 28 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, 1993 - September 30, 1994)
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

A field review by the Selway Bitterroot Leadership Team was scheduled for FY94, but was cancelled due to fire closures.

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

A field review by the Selway Bitterroot Leadership Team was scheduled for FY94, but was cancelled due to fire closures.

Item 3: Number of sites per square mile

Completed year 3 of the 5 year campsite inventory plan on schedule. Some sites had to be switched because of area closures due to fires.

Campsite inventories conducted in FY94 and previous years have shown more problem areas (areas out of Forest Plan standards) than had been indicated in the 1991 Selway Bitterroot Wilderness General Management Direction Forest Plan Amendment. Indicators monitored show present and past undocumented damage contributing to these new areas being out of Forest Plan standards. Educational efforts have been increased to teach users low impact techniques.

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

Completed year 3 of the 5 year campsite inventory plan on schedule. Some sites had to be switched because of area closures due to fires.

Campsite inventories conducted in FY94 and previous years have shown more problem areas (areas out of Forest Plan standards) than had been indicated in the 1991 Selway Bitterroot Wilderness General Management Direction Forest Plan Amendment. Indicators monitored show present and past undocumented damage contributing to these new areas being out of Forest Plan standards. Educational efforts have been increased to teach users low impact techniques.

Item 5: Number of parties encountered per day

Discussion:

Although Forest Plan standards to evaluate SBW Monitoring 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 FY94 the Aldo Leopold Wilderness Research Institute was working to develop a field data collection process.

Monitoring Results:

Limited field data was collected in FY94 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 FY94 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 FY94, five percent of the Moose Creek District's trail signs were replaced and brought up to standard.

Evaluation of Monitoring Results:

The District is now 85 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 Recon-

struction 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 the trail is reviewed every 3 to 4 years for public safety erosion hazards.

Monitoring Results:

In FY94, trail maintenance objectives were met on 98 percent of the mainline trails, 20 percent of the secondary trails, and none 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 FY94 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:

Three new non-system trails were identified on the Moose Creek Ranger District in FY94. The District now lists a total of 18 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 FY94 landings at Moose Creek airstrip were monitored during the heavy use season from April through August. Flights before and after that period were not counted. A total of 353 flights were logged with an average of 2.27 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, extended periods of high temperatures, and an active fire season in FY94 probably reduced airfield use.

Item 14: Number of landings per year by user type

Monitoring Results:

A total of 353 landings were recorded during the heavy use season from May through November at the Moose Creek airstrip. This total consists of 20 Forest Service, 180 private, 28 outfitter, 14 administrative, and 111 fire related 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 percent), administrative (4 percent), private (51 percent), outfitters (8 percent) and fire (31 percent).

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 FY94. 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, Northern Region Aviation and Fire Management , and Federal Aviation Administration personnel in FY94.

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 FY94.

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 resources. 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 put into 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 put into 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 three 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 1994. Information on 1994 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 1994 activities, a comprehensive Wilderness wide report has been prepared, entitled "Selway-Bitterroot Wilderness, 1994, 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 94.

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 1994 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, 1993 - September 30, 1994)
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 Forest-wide 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, technical information from the Regional landscape 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 or Regional landscape 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, 1993 to September 30, 1994)
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 -- 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. There has not been adequate funding in recreation to adequately monitor the recreation program on the river or adequately administer scenic easements.

Middle Fork Clearwater -- Inadequate funding has limited administration of scenic easements.

Selway -- The **Wild** segment of the Selway is managed through the management plan direction and a permit system. 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 assist 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 -- In compliance with Forest Plan direction, no management activities occurred, except for trail clearing by users along Trail 529. This stream is eligible for Scenic and Wild 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) -- Idaho Highway Department waste dump sites are a visual concern (do not meet partial retention), and occupy potential visitor parking sites.

Johns Creek -- 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 eligibility as a Recreational river.

West Fork Gedney Creek -- 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. The draft Legislative Environmental Impact Statement (LEIS) for these studies is available for public review in April of 1995.

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.

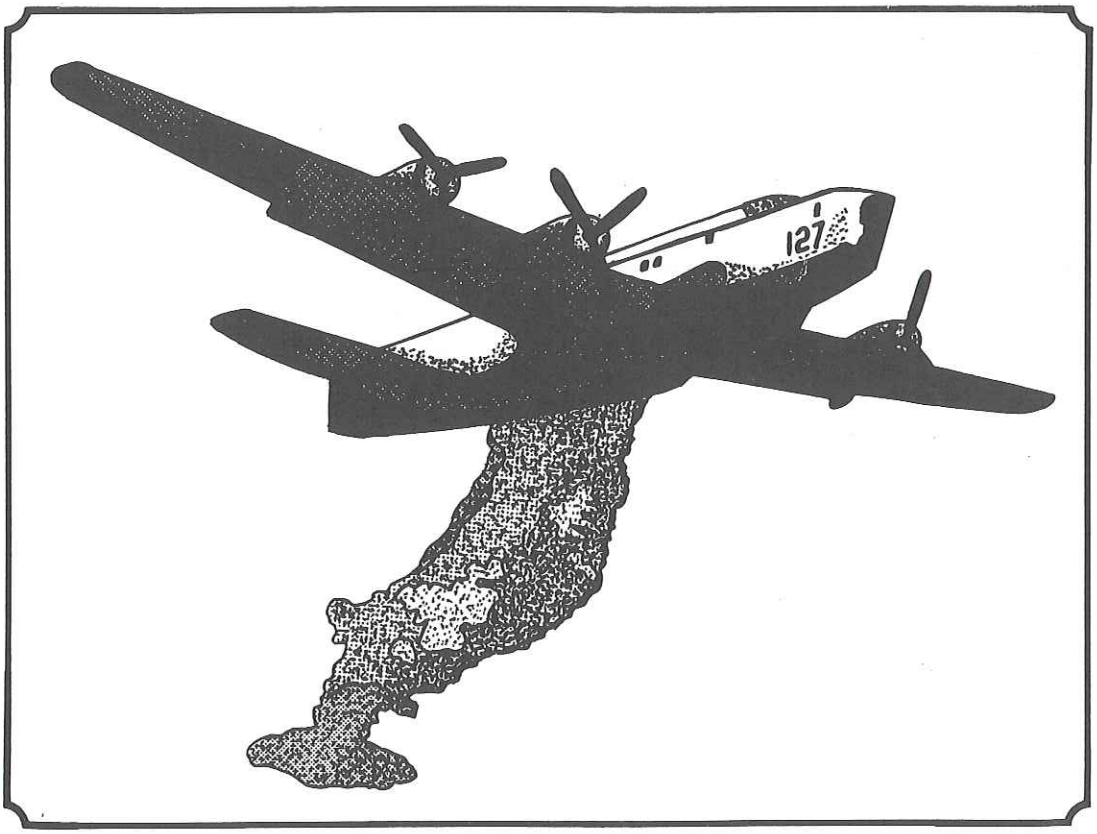
Evaluation of Monitoring Results:

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 meets 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, 1993 to September 30, 1994)
Reporting Period:	5 years (FY 1994)
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.

Fire, Insect & Disease

Discussion:

In 1994, the Nez Perce National Forest experienced its second highest number of fire starts, 339, which was exceeded only in 1967. Near normal May and June precipitation kept fire activity low until the third week of July, when the first of many hot lightning storms visited the Forest. Dry conditions and lightning activity continued until mid-October. The Grangeville Smokejumper Base experienced a new record in the number of fires jumped from the Grangeville Base. The Grangeville retardant base pumped a record number of gallons of retardant this year. The number of fires on the Nez Perce National Forest initially attacked with firefighters transported by helicopter substantially exceeded the previous record.

Monitoring Results:

ACRES AND NUMBER OF WILDFIRES

	Number of Fires							Acres Burned						
Types of Fires	1989	1990	1991	1992	1993	1994	10-Yr.Avg[1]	1989	1990	1991	1992	1993	1994	10-Yr.Avg.[1]
Lightning Fires	310	178	238	264	49	320	193	8,850	95	176	44,913	2	9,045	18,899
Lightning Fires with Control Strategy	310	155	238	216	48	309	179	8,850	83	176	44,741	2	5,172	12,652
Lightning Fires with Contain, Confine Strategy	0	23	0	48	1	11	14	0	12	0	172	0	5,172	6,247
Person-caused/ Misc.Fires	16	24	32	16	8	19	19	38	548	2,031	53	4	74	2,208
Total Fires	326	202	270	280	57	339	212	8,888	643	2,207	44,966	6	9,119	21,107

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

PRESCRIBED NATURAL FIRES (WILDERNESS)[1]

	1989[3]	1990	1991	1992	1993	1994	10-Year Avg.[2]
Number of Fires	0	2	13	12	5	0	8
Acres Burned	0	0	3,311	39	0	0	1,831

[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 1994 fires.

Regional and National Preparedness Levels effectively precluded declaration of new prescribed natural fires from late July until early September.

The Nez Perce National Forest, along with other Federal, State, and private agencies of the North Idaho Airshed Group, continued their dialogue and cooperation to minimize or prevent the accumulation of smoke in Idaho, to meet State and Federal ambient air quality standards.

The Forest has two fuels targest (acres). One concerns the use of fire protection dollars, and the other, brush disposal funds. The target for use of fire protection dollars is 3,159 acres. The actual acres accomplished were 2,439, a shortfall of 720 acres. Both natural and activity fuels (logging debris) were treated with these funds.

The Forest target, for the treatment of activity fuels with the use of brush disposal funds (3,644 acres), was exceeded. Actual treatment was 3,978 acres, which exceeded the Forest target by 334 acres. Burning conditions during the spring of 1994 were generally favorable. Nearly all of the Forest's broadcast burning and underburning program is now accomplished during the spring months while pile burning activities are generally done during the late fall.

The Forest Fire Management program was not funded at the most cost efficient level as described by the National Fire Management Analysis System. EFFS funding was used to fund much of the aerial attack program as well as portions of the District ground forces. These additional forces proved of great value during the extensive wildfire activity experienced during 1994.

Fuel treatment and 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 exceeded. Treatment projections of natural fuels were not attained.

■·■·■·Fire, Insect & Disease·■·■·■

Item 7:	Insect and Disease Activity
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	Significant increases in population or damage levels of insects or diseases

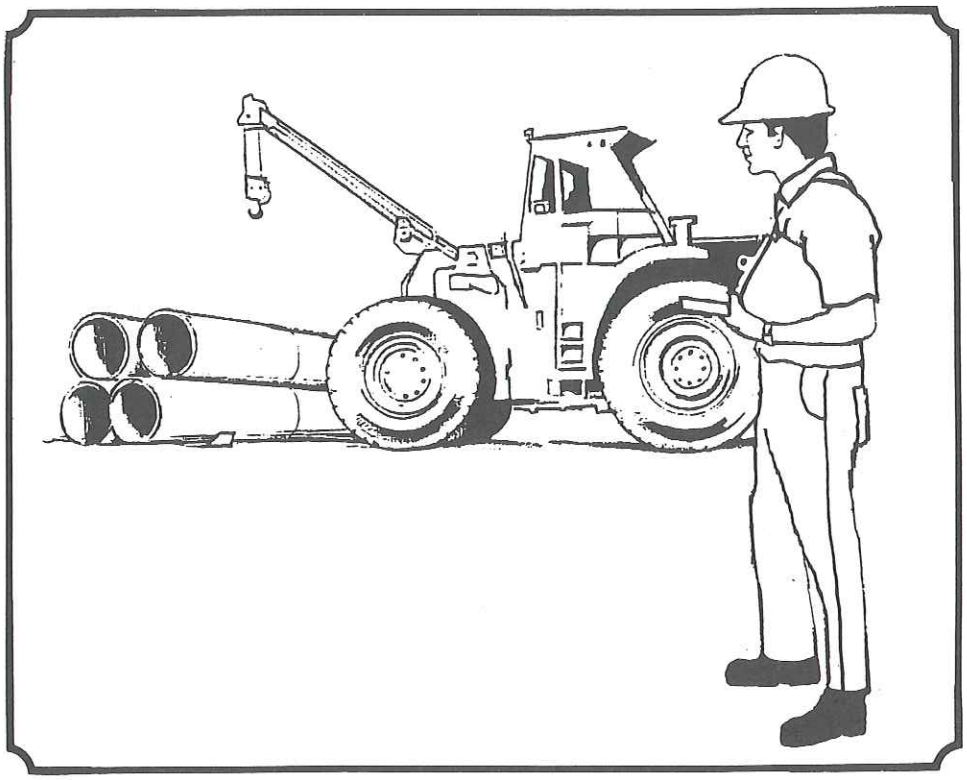
Monitoring Results:

Small populations of insects occurred throughout the Forest as a result of the cool, moist summer of 1993. 1994 weather was ideal for insects to expand substantially, but low numbers prevented this from happening. 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, 1993 - September 30, 1994)
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.

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 3 other seasonal work center water systems and 14 lookout and 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 nitrite/nitrate, and lead-copper was done on the community systems. If the systems fail testing requirements, they must be closed to use. Waiver of asbestos and dioxin testing for the three community systems were obtained this year from the state of Idaho D.E.Q. due to the low contamination risk.

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 15-20 miles per year. Wilderness boundary is located when needed for specific projects. Due to the more difficult terrain and the areas where corners have not been reestablished for nearly 100 years, the rate of boundary location and posting is now about 10-15 miles per year. Currently are processing one potential timber trespass and one small tracts.

Right-of Ways

Although no new roads or trails are currently planned across private property the Forest has a substantial backlog of roads and trails which have been managed under prescriptive rights. Currently the forest has one road right-of-way in the Regional Office for Office of General Counsel (OGC) review and approval. The forest is actively working three other road right-of-ways. Transportation planning on several districts is looking at trail needs with a potential of one to five active trail right-of-ways to be started this 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 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 1994 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 1994

Project	Planned Sedi-ment Mitiga-tion (%)	Windrow Slash	Asphalt/ Rock Surfac-ing	Rock Ditches	Grass Seeding Fertiliza-tion	Straw Bales/ Mulch	SPS 204[3]	Layer Place Fills	Critical Logging Controls (designed into Package)	Tempo-rary Water-bars	Gates Traffic Control	Total Project Cost $[4]
PUBLIC WORKS												
Allison Bridges[1]	NA	NA	X	NA	X	X	X	X	NA	X	X	131,125
Rec Site Paving	NA	NA	X	NA	X	X	X	X	NA	X	X	24,850
Fish Creek Access	NA	NA	X	NA	X	X	X	NA	NA	X	X	80,127
GAC Paving	80	NA	X	NA	NA	NA	NA	X	NA	NA	X	123,883
TIMBER SALES												
Silver West [2]	80	X	X	X	X	X	X	X	X	X	X	937,811
Twentymile [2]	80	X	X	X	X	X	X	X	X	X	X	367,662

[1] Projects awarded in FY94 that are scheduled to be completed in FY95.

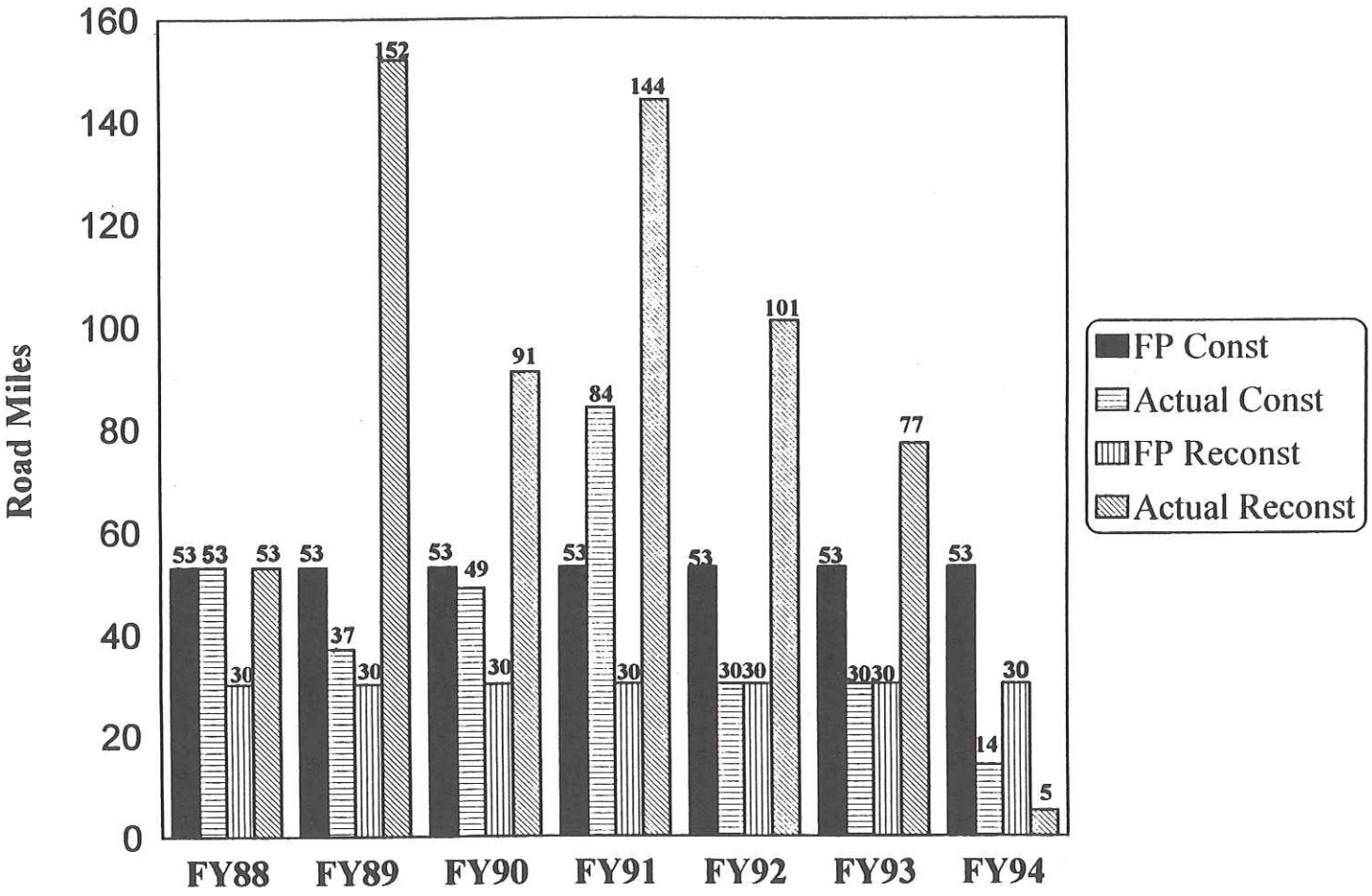
[2] Projects started in FY93 that were completed in FY94.

[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 14.1 miles of road were constructed in FY94 and 4.6 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.

Forest Plan Roads



While the annual miles vary, the total 297 miles of road constructed since 1988 is less than the 371 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 1994 on sediment mitigation projects. These included rebuilding the Berg Mountain 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 OR OTHER FUNDING

PROJECT	DESCRIPTION
Hydro Seeding	18 acres of road cut and fill reseeding on Red River R.D. and Elk City R.D.
Straw Mulching	16 acres of road cut and fill reseeding and straw mulching.
Forest-wide Materials	Purchase seed, straw, fertilizer, hydro-mulch and filter cloth for erosion control; culverts, woven-wire baskets

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 access management 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 Standard," 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	860	855
Level 2	500	501
Level 3-5	500	439
Total	1860	1795

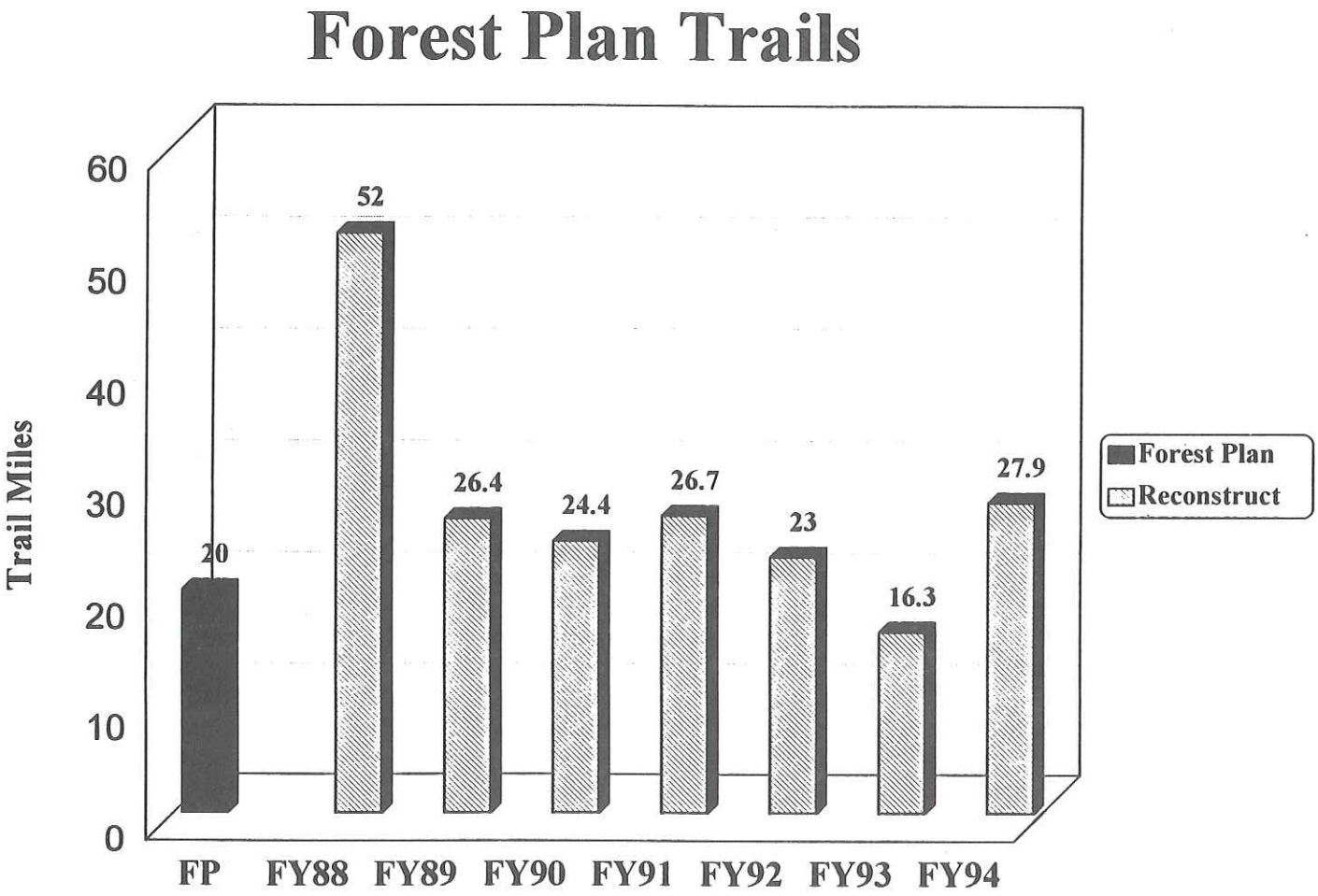
*Includes purchaser maintenance.

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 94, 60 miles of road were brushed.

Signs along the roads are a safety item for the driving public and also give information. In FY 94, 50 new signs were installed on the Forest and 80 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.



In FY 93, 1,731 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 increased the accomplishment, from 1,064 miles in FY 88 to the 1,731 miles accomplished in FY 94.

TRAIL MILES MAINTAINED

Maintenance Level	Total Miles Maintained
Level I	1552
Level II	58
Level III	121
Less than Level I	0
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, 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.

Reporting for this monitoring item is being expanded in this report compared to past years. Subject headings are being provided to help track monitoring efforts.

Monitoring Results:

Traffic Surveillance

In 1984, Nez Perce Engineering instituted a traffic surveillance program, using inductive loop equipment.

The objective of having a traffic surveillance program is to provide managers data on use of representative 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, turnout spacing, surface types, lane requirements, and signing.

The three highest traffic volume roads on the Forest remain #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.

Overall, review of the traffic count program across the Forest suggests that recreation related traffic is remaining fairly constant across the Forest with a noticeable peak around the start of the general big game hunting seasons and that timber harvest related traffic is declining.

Access Management

Road System

Inventory

The current Forest inventory shows 3,655 miles of road under Forest Service jurisdiction. Of this mileage, 1,196 miles are open and the remaining 2,459 miles are either closed to all vehicular traffic or have use and vehicle restrictions on them.

Effectiveness of Access Restriction Devices

The effectiveness of our access restriction devices (gates, barricades, etc.) continues to be questioned by interested parties. Unfortunately, very little quantifiable data exists to answer the questions. Without doubt, violations do occur. Furthermore, the amount and frequency of violations varies across the Forest; some District access coordinators are able to report that violations appear to be at a low level while others have areas of definite concern.

As a means to begin to obtain a measure of the effectiveness of closure devices, the Forest was able to install inductive loop counters at two gate locations in 1993. This was an initial effort to try and evaluate if the methodology would work. The sites chosen were on roads with seasonal restrictions i.e. open during the summer (from June 15 to September 15) and closed to all motorized use during the fall, winter, and spring. Due to the small sample size it is inappropriate to try and extrapolate the data to a generalized Forest-wide statement. The study did document substantial daily use during the open period and a substantial decrease in use during the restricted period. The study was incapable of determining if the u se during the restricted period was due to violations or permitted activities.

This type of monitoring was not undertaken in 1994, however a cooperative effort in conjunction with the Rock Mountain Elk Foundation is planned to continue the study in 1995.

Access for Hunters with Disabilities

Policy and guidance have been provided by the Regional Office in Missoula in the form of Manual and Handbook direction for providing access to hunters with disabilities. The Red River Ranger District has been managing such a program for several years. In 1994, the district provided 13.4 miles of road for this program. They received 24 applications.

Trail System

Groomed Snowmobile Trails

Efforts have been undertaken in recent years to provide opportunities for snowmobile recreationists. Through the cooperative efforts of local organizations, the State of Idaho Department of Parks and Recreation, and the Nez Perce National Forest, particularly the Ranger Districts, a number of routes are currently managed for winter snowmobile use.

The current inventory includes 271 miles of trail on the Elk City and Red River Ranger Districts maintained in cooperation with the Timberliners Snowmobile Club; 50 miles of trail on the Clearwater and Salmon River Ranger Districts maintained in cooperation with the Snow Drifters Snowmobile Club; and 45 miles on the Selway and Elk City Districts maintained in cooperation with the Valley Cats Snowmobile Club.

Ski Touring Trails

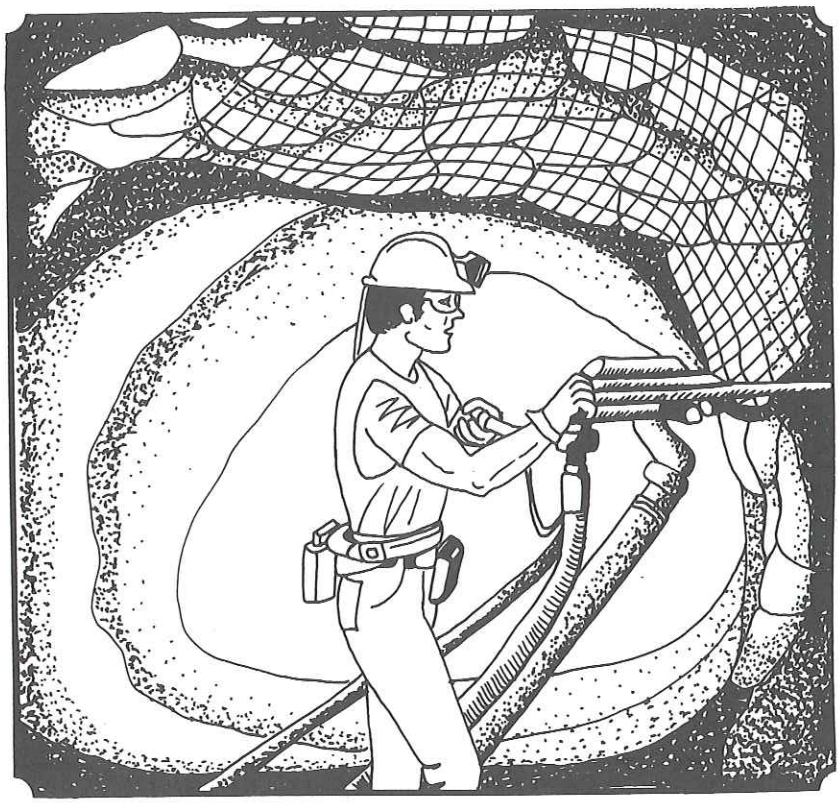
The Clearwater Ranger District, in cooperation with the State of Idaho Department of Parks and Recreation, offers opportunities for Nordic skiing. Currently, this groomed trail system includes 22.1 kilometers of trail at various difficulty ratings. There is additionally 15.2 kilometers classed as "most difficult" that receives infrequent grooming.

Motorized Trails

The Clearwater Ranger District, in cooperation with the State of Idaho Department of Parks and Recreation and Off Highway Motor Vehicle grant funding, have completed to date 20 miles of the Cougar Off Highway Vehicle motorized trail system. At completion this system will provide 30 miles of motorized opportunity.

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.



Item 2m:	Adequacy of Mining Operating Plans and Reclamation Bonds
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
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 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 32 active Plans of Operation, 2 need modification or updating to more accurately describe existing surface disturbance and/or changes in the operation. This is a decrease from 1993. A review of bonds being held by the Forest Service indicate that 40 need to be revised or released. Many of these bonds are associated with operations that have been inactive for a number of years, rather than with the active plans of operations. In addition, every year all bonds must be revised and updated to accurately 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	6	0	0	9
Clearwater	0	0	0	0
Red River	12	2	4	1
Moose Creek	0	0	0	0
Selway	0	0	0	0
Elk City[2]	14	0	27	7
TOTAL	32	2	40	17

[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 time frames are not 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.

Beginning 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 continues to deal with large numbers of notices of intent for very low level prospecting work.

Evaluation of Monitoring Results:

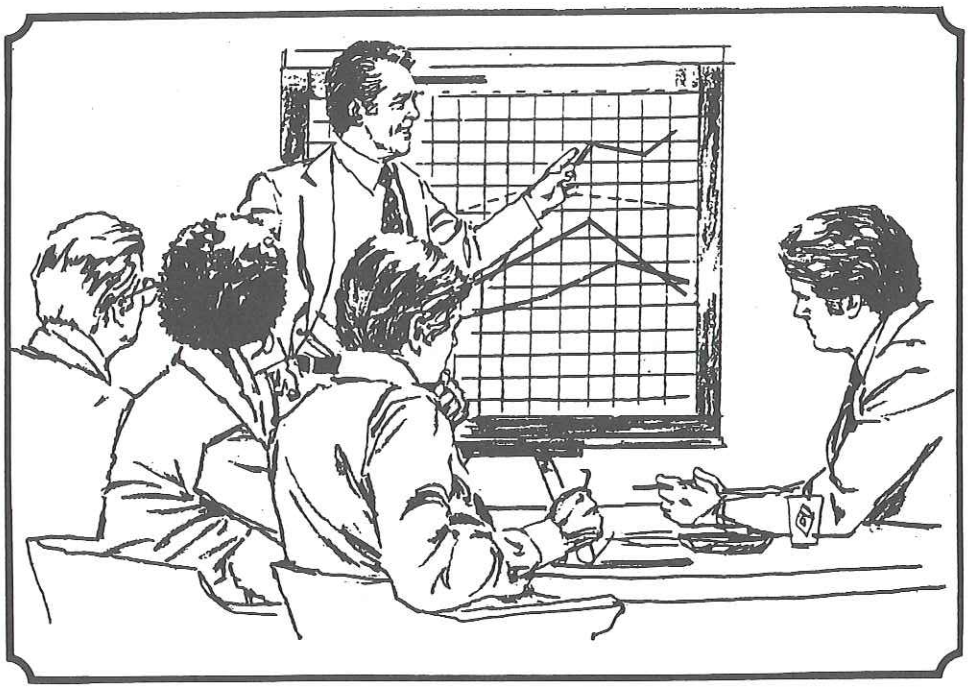
These monitoring results indicate that the Forest is actively working to improve the quality of its minerals management responsibilities in conformance with Forest Plan direction. The number of plans that need revision has decreased significantly since 1993. This reflects increased emphasis on minerals administration by the districts and a decrease in mining activity. A large number of the bonds on the Forest need to be revised. As mentioned earlier this reflects both yearly updating of bonds to more accurately reflect current reclamation costs and the need to release bonds associated with inactive plans.

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.

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
1994	6	121	50

On the Forest as a whole, some unnecessary disturbance to surface resources is occurring. The 1994 figures represent effects of a continued reduced workload, which allowed a higher quality of administration. The Forest is seeing a large increase in recreational mining activity and is struggling with how to adequately administer these operations. 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.

Economics



Item 3:	Cost of Implementing Resource Management Prescriptions
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
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 approximately past funding levels.

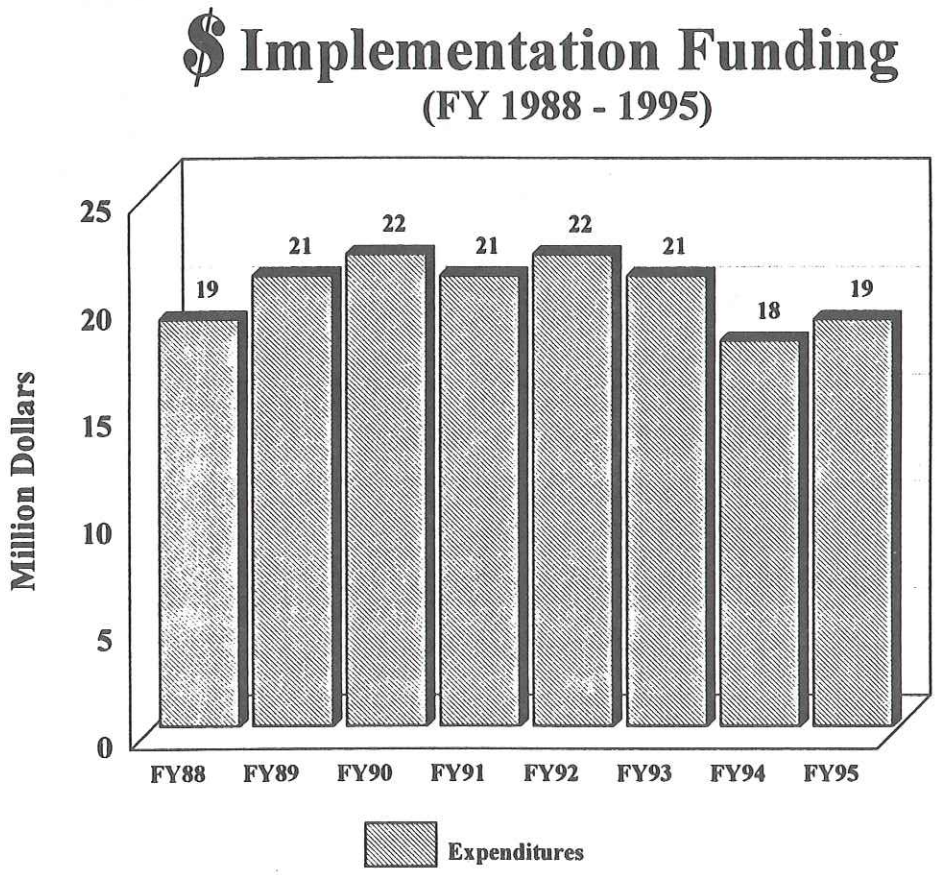
Monitoring Results

Table 3, found in the beginning of this report, displays budget allocations and actual expenditures for the fiscal years 1992, 1993, and 1994. Dollars have been adjusted to constant 1994 values.

Table 4 displays projected annual costs for FY 1995. Corresponding activities and outputs for the period 1992-1994 are displayed in Table 1.

Evaluation of Monitoring Results

Past monitoring has shown that funding levels received have consistently been less than full Forest Plan funding levels. This 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 full Forest Plan funding levels have not been attained and may not be attained in the future.



The chart shown above shows funding levels expended by the Forest in the past seven years and the projected funding level for FY 95. Dollars for all years have been adjusted to 1994 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, 1993 - September 30, 1994)
Reporting Period:	7 Years (FY 1994)
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 94$)	Actual FY 1988 Revenues (FY 94$)	Actual FY 1989 Revenues (FY 94$)	Actual FY 1990 Revenues (FY 94$)	Actual FY 1991 Revenues (FY 94$)	Actual FY 1992 Revenues (FY 94$)	Actual FY 1993 Revenues (FY 94$)	Actual FY 1994 Revenues (FY 94$)
Timber	$15,629,404	$5,543,731	$8,576,394	$7,747,824	$5,008,625	$8,327,958	$9,040,121	$15,865,663
Range	$ [1]	$41,973	$44,975	$47,258	$40,315	$39,228	$39,202	$41,792

[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 in FY 88 - FY 93 were due to two factors. First, we were not experiencing stumpage values as high as predicted in the Forest Plan. Stumpage values used in developing the Forest Plan were approximately $225/MBF in constant FY 94 dollars. The actual experienced stumpage values were considerably lower. Second, timber harvest acres in fiscal years 1988 through 1994 were lower than the predicted average annual harvest displayed in the Forest Plan (Table 1). Also, see table 11-c on page 53 in the timber section. It shows that an average of 71 percent of the annual projected harvest acres were actually harvested.

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 1994 was due to the higher volume of timber harvested, higher prices 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 94$)	FY 1989 (FY 94$)	FY 1990 (FY 94$)	FY 1991 (FY 94$)	FY 1992 (FY 94$)	FY 1993 (FY 94$)	FY 1994 (FY 94$)
Gain/Loss Before Payments to States	361,039	1,675,235	766,677	-2,194,205	-234,195	1,005,133	5,710,658

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.

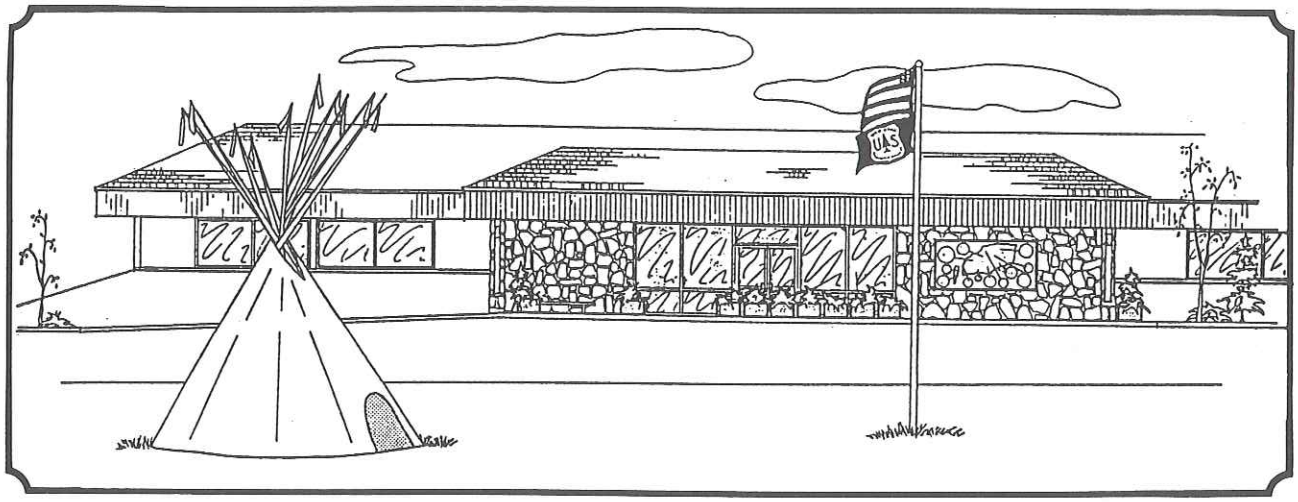
The range revenues in the Forest Plan were incorrectly calculated by multiplying the 1986/1987 grazing fee against the permitted Animal Unit Months (AUMs), instead of Authorized Head Months of use. Range revenues are correctly calculated by multiplying the current grazing fees against the Authorized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

In Fiscal Year 1994, grazing fees were $1.98 per head month for cattle and horses, and $0.40 for sheep. In 1994, 10,274 cattle and horse head months and 5,375 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, 1993 - September 30, 1994)
Reporting Period:	Annually
Variability Which Would Initiate Further Evaluation:	Unacceptable effects determined by the Forest Interdisciplinary Team.

■·■·■·Effects on Adjacent Lands, Resources, Other Agencies·■·■·■

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. 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.

In varying degrees, all Idaho counties are affected by activities on national forests -- jobs and wages, recreation opportunities and more. county governments, in particular, are directly affected because they receive federal revenue-sharing payments as a source of funding to support their road and school programs. In Idaho, timber-related revenues dominate the 25 percent fund, and payments made through the 25 percent fund dominate other revenue-sharing programs.

Effects identified in past years' monitoring may or may not continue to affect our neighbors in 1994. Results that have been adopted as Action Items (see Appendix) are not repeated here from previous years' monitoring reports.

Monitoring Results:

Identified during FY 1994 Monitoring:

Clear Creek Coordinated Resource Management Plan (CRMP): Coordination of efforts in the Clear Creek watershed on private, Federal, State, and Tribal lands continued under the CRMP process in 1994.

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 and addressed in the ongoing section 7 analysis work being done on the Forest.

Post and Pole Industry: Two post and pole manufacturing operations were started up in fiscal year 1993. The Forest was able to provide 519 MBF post and pole material to support these businesses in 1994.

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 two Wild and Scenic River easements on the Mackay Bar property on the main Salmon River and purchased 32.5 acres of land on Painter Bar. Through a land exchange, 6.2 acres of federal land was traded for 42.09 acres of private land on Mackay Bar.

Farm Bill: Awarded two new grants. One for a sewer lift station upgrade and one for community action planning in Elk City.

Forest Service Payments to Idaho County from All Receipts: In Idaho county, the Nez Perce National Forest total receipts for FY94 subject to the 25 percent fund were **$15,450,760.00**, of which 99 percent was generated through timber sale revenue.

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

Fiscal Year	Nominal Dollars	Constant 1994 Dollars
1994	3,872,891	3,872,891
1993	2,197,978	2,252,927
1992	2,042,981	2,151,259
1991	1,303,797	1,413,316
1990	1,276,546	1,446,327
1989	1,243,278	1,467,668
1988	995,846	1,226,882

Evaluation of Monitoring Results:

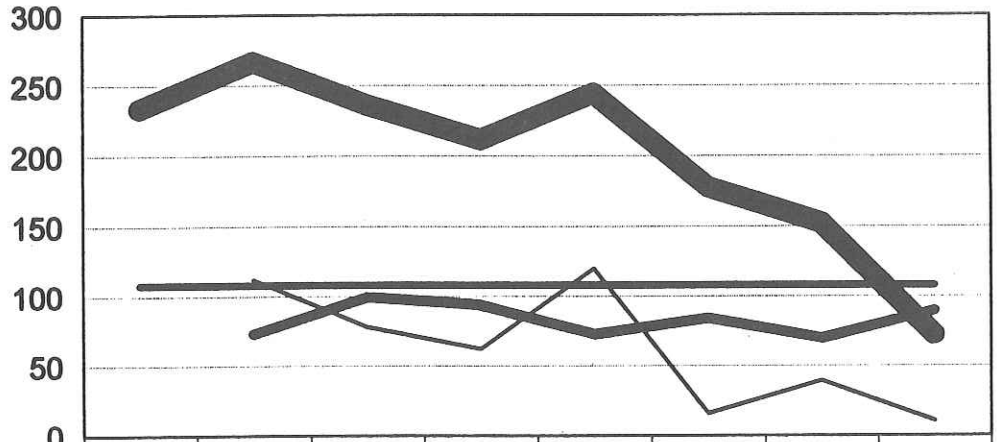
Total 25 percent fund receipts for Idaho County, including the Bitterroot ($29,394), Clearwater ($1,800,218), Nez Perce ($3,872,891), Salmon ($19,993), and Payette ($987,125) National Forests was $6,709,651.80. The payment to Idaho County from all receipts from the Nez Perce National Forest in fiscal year 1994 was higher than any payment (in constant 1994 dollars) over the previous 15 years.

The 25 percent fund revenues are influenced by two factors, volume harvested and timber prices. Both of these factors work together simultaneously. This becomes clear as we look at FY 94 revenues. The volume of timber harvested remained quite high as the purchasers accelerated activity on salvage sales which had been purchased at high stumpage rates. Consequently the 25% fund revenues are at an all time high.

Logging and Sawmills: Primary lumber production facilities, especially in the local area, are highly dependent upon national forest lands for their supply of raw material. This can be monitored through the volume sold, volume cut, and volume that has been sold but not harvested. For a sawmill to maintain its economic viability it needs to maintain at least two to three years supply of raw material under contract at all times.

Volume Remaining/Cut/Sold

Nez Perce National Forest



	FY87	FY88	FY89	FY90	FY91	FY92	FY93	FY94
Uncut Volume	233.4	267	236.4	211.7	244.4	177.8	152.3	72.1
Volume Sold		112.1	77.9	62.2	120	15.9	39.4	10.7
Volume Cut		72.9	99.5	93.4	72.8	84.2	69.6	89.9
ASQ	108	108	108	108	108	108	108	108

■Uncut Volume —Volume Sold ■Volume Cut —ASQ

■·■·■·Effects on Adjacent Lands, Resources, Other Agencies·■·■·■

In the fall of 1994 it was announced that of the Ida-Pine lumber mill would close. This facility, which provided direct employment for 102 employees and an additional 125 supportive jobs. The timber harvest (logging) industry has not been impacted as yet, as the mills have been liquidating their raw material inventory that has carried forward from prior year inventories. The volume sold and volume remaining under contract (see graphics on page 120) of this report display clearly that the manufacturing facilities and harvest industry may be impacted if present trends continue.

Range: The Forest will continue to work more closely with permittees to review activities that may affect their livestock management. The result may be an increase in operating costs.

Wild and Scenic Rivers: 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, but prevents activities that might degrade water quality, scenic resources, and recreational opportunities.

■·■·■·Effects on Adjacent Lands, Resources, Other Agencies·■·■·■

Item 9:	Effects of Other Government Agencies' Activities on the National Forest
Frequency of Measurement:	Annually (October 1, 1993 - September 30, 1994)
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 1994.

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 several project implementation monitoring reviews.

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. A public meeting was held through this committee where several concerns came forward but not official action was taken in 1994.

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.

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 continued operating in FY 1994. 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 Fish and Game biologists worked with the Nez Perce National Forest on a conservation strategy for white-headed woodpeckers.

■·■·■·Effects on Adjacent Lands, Resources, Other Agencies·■·■·■

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.

A programmatic agreement with SHPO and the preparation of a cultural resources overview through the University of Idaho, will result in the more reliable and efficient identification and protection of all cultural resources, thus insuring compliance with the law and SHPO requirements.

Idaho Department of Parks and Recreation: The Fish Creek campground rehabilitation for handicap service and accessibility on Fish Creek and the Silver-Cougar off-highway vehicle trail construction was completed in 1994. Fifty-three miles of ORV trail maintenance was completed through provided funds, equipment and people to groom snowmobile trails.

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 other airstrips. The Wilson Bar facility, which was closed in 1992, was reopened through the Division of Aeronautics maintenance work.

Idaho Conservation Data Center (ICDC): The ICDC cooperated with the Forest in conducting presence/ distribution surveys for three sensitive plants and provided numerous data queries about rare species sightings for biological evaluation.

Idaho County: The County maintains the Salmon River, Dixie and Crooked River roads under cooperative agreements.

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 snowmobile funding in support of the snowmobile trail grooming program as well as cooperates in the snow plowing 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. The two agencies also cooperate in search and rescue missions. The Forest provides cooperative assistance by allowing the Sheriff's Office to use available Forest Service equipment when needed.

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 work force and accomplish resource management objectives. The Nez Perce Tribe is sponsoring a young horsemen's program called Appaloosa. This group will concentrate on learning packing skills through an outfitted educational trail ride program. The Forest Service is supporting this activity by teaching packing skills with forest and the 9 Mile Pack Train.

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.

U.S. Fish and Wildlife Service (USFWS): Approximately one hundred biological evaluations were conducted for threatened and endangered, and sensitive species in FY 94.

■·■·■·Effects on Adjacent Lands, Resources, Other Agencies·■·■·■

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.

Bonneville Power Administration (BPA): The Forest has continued 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. 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. This work has continued into FY94 and requires a considerable shift in Forest work to address the salmon issue. Two hundred forty one biological evaluations were completed in FY 94.

Evaluation of Monitoring Results:

As in previous years, in fiscal year 1994 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 NMFS, the Forest has programmed a major part of its funding and personnel to work on biological evaluations on all projects and activities. The purpose of these evaluations is to insure that projects and activities have a no effect or beneficial effect 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 following phone numbers:

Forest Headquarters	(208)983-2280
Salmon River Ranger District	(208)839-2328
Clearwater Ranger District	(208)983-0696
Red River Ranger District	(208)842-2235
Moose Creek Ranger District	(208)983-2623
Selway Ranger District	(208)926-7725
Elk City Ranger District	(208)842-2233

General Description of the Different Levels of Accessibility
(A Design Guide/Universal Access to Outdoor Recreation)

Accessible/Easy	Moderate	Difficult
The general level of expected access to elements and spaces integrated into developed recreation sites or portions of sites. These are typically in: urban/rural settings; at sites managed to provide urban/rural recreation experiences; or at sites managed to provide an easy level of accessibility as defined by these guidelines.	The general level of expected access to elements and spaces integrated into moderately developed recreation sites or portions of sites. These are typically in: roaded natural settings; at sites managed to provide roaded natural recreation experiences; or at sites managed to provide a moderate level of accessibility as defined by these guidelines.	The general level of expected access to elements and spaces integrated into lesser developed recreation sites or portions of sites. These are typically in: semi-primitive settings; at sites managed to provide semi-primitive recreation experiences; or at sites managed to provide a difficult level of accessibility as defined by these guidelines.

Monitoring Results:

Accessibility by Accessibility Levels

Facility	Easy/Accessible	Moderate	Difficult
Fish Creek Pavilion 1994 - 100 People	75	25	
Fish Creek Campground Sites: 11 total	9	2	
Castle Creek Campground Sites: 9 total		8	
South Fork Campground Sites: 9 total	6	2	1
Slims Camp Campground			Accessible at this level*
Selway Falls Campground			Accessible at this level*
O'Hara Bar Campground Sites: 35		5	10
Spring Bar Campground Sites: 17		6	3
Allison Creek Picnic Area Sites: 2 total			1
Wildhorse Campground			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
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

■·■·■·Other Monitoring·■·■·■

Facility	Easy/Accessible	Moderate	Difficult
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

*Depending on weather

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 moderate or difficult Accessible 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 were completed in FY 94 that 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, 1995.

By the end of 1995, 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. Beginning in FY93, District Ranger authority decisions are also shown.

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
94	4	35	11,230	319	3.0	1.3
7-Yr.Avg.	3.6	10.9	57,160	3,077	5.0	41.7
Total	25	76	400,120	21,542	--	291.9

[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 four new timber related decisions in FY 94 were all for "no-effect" (from an Endangered Species Act perspective) District Ranger authority sales. The included sales were Fall Creek, Newsome Creek, Flint Creek Post/Pole Salvage (subdivided into 18 small sales), Salmon River District 1994 Post/Pole Program (subdivided into 12 small sales), H.R. Salvage, Goose Dump Salvage and Corduroy Salvage. The decisions regarding these 35 small sales, were all categorically excluded and documented in decision memos. The sales contained a mix of sawlogs, posts/poles and pulp.

Evaluation of Monitoring Results:

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

Several "may effect" Forest Supervisor authority decisions originally anticipated in FY 94 were delayed pending completion of the Section 7 ESA consultation process with the National Marine

Fisheries Service (NMFS) on the endangered salmon. We expect to receive watershed level biological opinions with terms and conditions back from NMFS early in fiscal year 1996.

As of the end of fiscal year 1994 (7 years since the Forest Plan went into effect), the Forest had completed site-specific analysis of 44 percent of the total suitable land base of 911,669 acres. Of the 25 total decisions, 3 were Environmental Impact Statements, 16 were Environmental Assessments, and 6 were Categorical Exclusions.

The increase in the number of sales reflects the Forest's "Three Point Strategy." Point #2 of this strategy concentrated on preparing small, "no effect" sales.

3. **Forest Monitoring Reviews Conducted with the Public**

The Forest conducts interdisciplinary monitoring reviews of representative activities during the year to assess compliance with direction set by the Forest Plan and decisions of the implementing Environmental Assessments. In order to provide members of the public with an opportunity to view and comment on the results of management practices on the Forest, each year they are invited to several monitoring field trips. Feedback by members fo the public is a valued part of the monitoring process. In 1994, fire salvage, riparian grazing and management of the grand fir mosaic were subjects of these reviews. Following are summaries of the findings and recommendations. The full reports are available in the Supervisor's Office. This program will continue during the summer of 1995. A news release will be issued in early June announcing monitoring subjects and approximate dates.

Scott Fire Salvage

An interdisciplinary team from The Salmon River Ranger District and the Supervisor's Office met with interested members of the public at various sites on the Scott Salvage Sale on August 9 and 10. The fire burned about 6000 acres in the fall of 1992. Fifteen hundred acres were salvaged between the fall of 1993 and the spring of 1994. Issues monitored were snag retention, sediment mitigation, noxious weeds, old-growth, and riparian area management. The team also discussed fuel storage and transport and other subjects related to the Main Salmon River Northwest Biological Assessment.

The team reviewed results of after-harvest snag counts in eight units. The counts met or exceeded the contract requirements which followed direction set by the Environmental Assessment. The team agreed that Forest Plan snag guidelines are not entirely appropriate, especially for burned areas. Also, more snags were left because the burned area was still within an old growth management area. Black-backed woodpeckers, a sensitive species, were present requiring modification of snag guidelines. A new contract provision requiring purchaser to select snags was more effective than Forest Service designation.

The team reviewed results of sediment mitigation measures (helicopter logging, leaving sufficient wood and slash on site, recontouring of new temporary roads, seeding and mulching of landings, replacement of surface aggregate on two roads, drop inlets, and stabilization of selected road cuts/fills). The team concluded that potential for sediment production was prevented or adequately reduced. They felt a new forest seed mix containing native annuals was needed. Also, rehabilitation of burns by seeding is generally not needed. We should probably try to seed natives to control cheatgrass and noxious weeds, however.

They found that noxious weeds, especially spotted knapweed, were increasing. Several thistle species and goatweed were also present. Infestations appear related to disturbance created by road cuts and fills. Fire influences could not be determined. The team concluded that the Forest Plan does not adequately address noxious weeds. More inventory, prevention, and treatment strategies are needed.

Sale activities complied with Plan riparian management guidelines. Riparian values could suffer if riparian zones become no-treatment areas. Currently riparian areas are functioning well hydrologically, with good debris recruitment, energy dissipation, and sediment trapping. Future direction needs to address how to simulate fire and other disturbance factors which naturally occur. The question of suitability for timber management and projecting yields from riparian areas was discussed.

The mitigation measures and monitoring requirements of of the Main Salmon River Tributaries NW Biological assessment were reviewed. All have been complied with. Factors to prevent or mitigate fuel spills were also reviewed (see Monitoring Trip Notes for details).

Grand Fir Mosaic Review

The purpose of the review, conducted on August 29 by an interdisciplinary team from the Clearwater Ranger District and the Supervisor's Office and interested members of the public was to review affects of past timber harvest within the mosaic and to recommend how to describe the mosaic in terms of suitability for timber management.

The grand fir mosaic is a mixture of various proportions of conifers, Sitka alder, western coneflower and associated species on predominately grand fir/wild ginger habitat types between 4000 and 6000 feet from the Salmon River north to the Clearwater-St. Joe divide. It is characterized by Typic Cryandept soils, 78,000 acres of which occur on the forest and generally considered to be the total mosaic area. There are an estimated 23,000 acres of nonforest openings on these soil types.

Nonforest openings of bracken fern are typical in the northern portion of the range of the mosaic. Alder openings are typical in the east, and coneflower openings in the south. Natural regeneration is usually limited to grand fir and spruce. Natural or artificial regeneration of larch, lodgepole, ponderosa pine, Douglas-fir, and white pine is noticeably absent. Any regeneration is usually present only where conifers were well established before disturbance. Endemic gopher populations are high and expand as forest canopy is opened.

Several clearcuts harvested in 1967 near Big Burn Point were examined. One stand was planted twice and is currently listed as a regeneration failure. Approximately half of the 57 acre stand is in alder. Only a few trees per acre were harvested from the alder and regeneration there was low. The other half regenerated successfully with planted Douglas-fir which are now 12 to 20 feet tall. Stocking is about 200-300 trees per acre. Gopher activity was high. The team recommended that the silviculturist review the prescription to see if stocking levels for certification may have been unrealistically high.

Two other stands in the area were reviewed. They were similar in respect to treatment, extent of alder, gopher activity, and regeneration. These stands were certified stocked. The team recommended that the timber stand management record system be updated to reflect the percent of each which were non-stockable.

Since alder types within the stands reviewed should be classed nonforest, they are by definition unsuitable for timber management. Some of these inclusions would be difficult to deliniate or even detect on aerial photos. Also, some forest types adjacent to mosaic openings may be transitional to the opening type (either alder or bracken fern) and response to timber management may be unknown or regeneration cannot be assured. These are reasons to class unsuitable for timber management. Exact delineation of these differences within the mosaic are impractical if not impossible to make. The team felt it would be simpler to classify the mosaic tentatively suitable and estimate the percent unsuitable included within for planning.

The team recommended that prescriptions should be designed with specific practices and rotation lengths for mosaic lands. The following factors should be considered: reasons for nonforest openings are not completely understood; nonforest and unsuitable forest inclusions are relatively stable and important features of the mosaic landscape; uneven age, small patch clearcuts or group selection cuts might emulate natural patterns; lightening strikes take out individual trees, burn small areas, and create small stand openings; regeneration prescriptions must address effects of increased gopher activity; typical stands have much dead and down which should be maintained; soil disturbance such as dozer piling seems to increase gopher populations and should be avoided; jackpot burning of only the activity-created fine fuels seem most appropriate; stand replacing fires are rare and suggest long (150+ year) rotation lengths; ages of some trees adjacent to alder openings are often older, probably due to a buffering effect of the alder, suggesting an even longer average rotation length.

The team concluded: no timber management should be scheduled on the unsuitable portion of the mosaic; if practices were scheduled on unsuitable portions to meet ecosystem management objectives, timber yields would be non-chargeable (not contribute to the allowable sale quantity); the Forest should incorporate these and other considerations into standard prescriptions that would be applied to mosaic lands; after testing and refinement these prescriptions would become standards to guide implementation of future forest-wide assessments or the preferred alternative of the revised Forest Plan.

Riparian Grazing

An interdisciplinary team from the Supervisor's Office and Red River Ranger District and interested members of the public visited sites on the Mallard Creek Allotment on September 20 to monitor effects of cattle grazing in riparian areas. Three members of the public also attended.

Four permanent stations on Jack and Mallard Creeks were visited. The allotment management plan, annual operating plan, Forest Plan Standards and Guidelines, and status of consultation with the National Marine Fisheries Service (NMFS) were discussed. Previously recorded data for grazing utilization and bank disturbance for these stations were reviewed.

The team agreed that the annual operating plan included appropriate standards (30% forage utilization and 10% bank disturbance) to insure that riparian objectives of the Forest Plan were met. These standards have been concurred upon by NMFS in the Biological Opinion for the Main Salmon River Tributaries Northeast. Monitoring measurements throughout the year revealed that forage utilization was light (10%) and bank disturbance was minimal (2%). The team generally agreed that riparian management objectives were being met.

The team felt that implementation monitoring such as this was adequate and in fact the annual operating plan's monitoring requirements met the terms and conditions of the Biological Opinion. However, the Forest must develop an effectiveness monitoring plan to insure our assumptions are correct and to comply with other terms outlined by NMFS in Biological Opinions (a team has begun work and should complete a plan by March 1995).

The team recognized that no grazing monitoring occurs in timber harvest units other than regeneration survival exams done following tree planting or initiation of natural regeneration. The team recommended that Districts establish monitoring stations in such areas to assure grazing standards are met.

Selway Fire Salvage

On October 5 and 6, 1994 an interdisciplinary team from the Supervisor's Office and Selway Ranger District and interested members of the public visited sites on the Selway Fire Salvage

Sale Area and adjacent areas to monitor effects associated with the timber sale and the effectiveness of prescribed mitigation.

The team's monitoring objectives were to: monitor compliance with riparian management guidelines of the salvage sale environmental assessment (EA) and the Forest Plan; determine if sediment reduction measures were effective; evaluate effectiveness of stream improvement work in Nineteen Mile Creek; assess response of wildlife browse to wildfire and slash burning; evaluate the effects of salvage harvest on sensitive plant populations.

Riparian Management The EA specified no trees would be cut within 200 feet of perennial streams and 100 feet of intermittant streams. The team found that some trees had been marked and cut within the 100 foot no-cut zone along intermittent streams. This harvest should have no affect on downstream water temperatures. The observed harvest retained enough dead trees for short term (0-30 years) woody debris recruitment, but may lack enough larger trees for long term debris recruitment.

The team felt that direction in the prescriptions and marking guides conflicted with the 100 foot no-cut direction in the EA. Marking guides stated that along intermittent creeks "...only those trees which are not needed for slope stability can be removed...and removal...can be 30% of the standing dead but can vary depending upon site...guidance must be provided by a soil/watershed specialists." The harvest along these intermittent creeks met Forest Plan direction for maintenace or enhancement of riparian values.

The team observed little soil movement from harvest activities. More soil movement could be attributed to big game and gophers, both of which have increased since the fire, than to harvest activities. No slope stability problems were observed and potential mass wasting should be monitored again next year. Some soil movement was observed from the single log landing. It seemed to be drainage from standing water and did not reach a stream course. Soil was deposited below several culverts on the landing access road, effectively trapped by straw bales. None reached the Selway River. These sediment traps should be monitored through the next wet season. The landing had been seeded but germination was spotty. Reseeding is planned.

Stream Improvements Rock gabions constructed in Nineteen Mile Creek after a debris torrent in the 1960s seem to restrict fish passage. The gabions should be modified to allow passage because surveys show most resident species exist in the lower creek. Trees and logs placed by helicopter in 1993 should become active woody debris in the stream channel as they are moved by high water, snow loading and decay. A survey of the entire length of Nineteen Mile Creek is recommended and planned for 1995 to assess the effectiveness of the placed woody material.

Forage Production The team attempted to describe differences in quality and amount of forage between wildfire and prescribed fire. Several areas were visited to compare natural and prescribed fire which occured at different intensities and times of year. Parts of the Boyd Creek drainage burned as a low intensity, late summer, wildfire in 1992 and was compared to areas burned by crown fire (prescribed and natural) in the Rackliff drainage in 1990 and 1992. The team found similar numbers of stems per acre of forage plants in each, the hotter Rackliff fire produced a greater variety of species and vigor than the low intensity Boyd Creek fire. This is probably due to more sunlight and no tree competition from a crown fire. It's possible that the less vigorous forage of the low intensity fire may provide browse over a longer time as the vigorous forage could quickly grow out-of-reach of big game.

The team attempted to describe differences in winter range forage produced by slash burning of timber sale units of similar aspects and elevations as that produced by the Rackliff fire. A unit (Peterson-Salt #10), clearcut and burned in the fall of 1993 with the objective of increasing winter forage, contained similar stems per acre of forage species as wildfire burned sites. The species composition was mostly holly hock with some redstem ceonothus and willow. The unit

seemed to provide good summer forage but its value for winter browse, due to prevalence of holly hock, may be low. Perhaps the redstem and willow will out-compete the other species and winter browse will increase in the future. This situation should be monitored.

Another unit (Peterson-Salt #5) was burned in the spring of 1993 and is now composed largely of thistles and small amounts of other browse species. It is unknown if this unit will ever produce much winter browse. This situation, especially the prevalence of thistles in spring-burned units, should continue to be monitored.

The monitoring team could not conclude if the forage production from natural and prescribed fires would result in increased elk capacity as projected by the Forest Plan. They felt that the Plan should strive to maintain a certain percent of the landscape suitable for winter range in early seral stages to meet winter forage objectives (rather than an acres burned target). Wildfires which achieve this condition should count toward treatment objectives. They also thought it possible that some burning and resultant forage responses concentrate big game on erosive soils or unstable slopes which could contribute to stream sedimentation.

Sensitive Plants Constance's bittercress (Cardamine constancei) was the only sensitive plant species abundant enough to assess response to logging. Known population sites were surveyed within logged and unlogged portions of the burn. Cardamine was abundant and most plants flowered in the unlogged sites. It existed only in microsites of the logged areas, apparently hindered by high slash levels. Thus, salvage logging may hinder response of Cardamine in burned areas (as oppossed to no salvage), but long term response should be positive as it is an early successional species. Cardamine may also suffer from the competition of other species which increased after burning, but this seems to be part of its life history. Future monitoring of the population is planned.

4. **Noxious Weed Management**

Noxious weeds and invasive exotic plants are a rising concern on federal land across the western states. Many invasive exotics can invade healthy ecosystems, displace native vegetation and affect species diversity and wildlife habitat. Widespread infestations may lead to soil erosion, reduce quality of recreation for visitors and threaten the long term viability of rare plants. Invasive exotics have been identified as major threat to our native biodiversity.

The Nez Perce National Forest is moving forward with an active management program for noxious weeds. The program is an integrated approach to managing the weeds on the forest and includes: education/awareness, inventory, prevention/early detection, treatment and monitoring.

Management priorities for the Nez Perce are: 1) to prevent the establishment of potential invaders; 2) the eradication of new invading noxious weeds; 3) the control of satellite infestations including the treatment of transportation corridors and areas of concentrated human activities and 4) the containment of large established infestations.

The noxious weeds that are of greatest concern to the Forest are Dyer's Woad, Rush Skeletonweed, Diffuse Knapweed, Russian Knapweed, Toothed Spurge, Leafy Spurge, Sulfur Cinquefoil, Spotted Knapweed, Scotch Thistle, Orange and Yellow Hawkweed and Common Crupina.

District and Forest personnel have worked with many user groups and interested parties during the 1994 season in the identification and risks of invasive exotic plants. District personnel conducted field trips to review infestation and risk levels in sensitive areas such as wilderness and wild and scenic river corridors. Field crews are also educated in the identification of weed species.

Each district has a noxious weed coordinator that directs inventory, control and monitoring activities. Noxious weed concerns are addressed in all ground disturbing activities. There is on-going inventory work where noxious weeds are identified and mapped.

The Forest treated approximately 250 acres during the 1994 field season, using a variety of tools. Weeds were treated by the use of herbicides, the release of biological control agents, the manual pulling of isolated infestations, mowing and the seeding of disturbed sites. The treatments are consistent with the estimated level outlined in the Forest Plan. There is a recognition, however, that a stronger effort is needed to reduce the impacts from noxious weeds. The Forest is currently working to increase the funding for noxious weed management.

An important development in 1994 was the establishment of the Salmon River Weed Management Area. This is 500,000 acre area in the lower Salmon River Canyon where a collabrative plan has been developed between Idaho County, private landowners, and Federal and State land management agencies to work together for the common objective of controlling noxious weeds. The intent of the weed management area is to bring together those responsible for weed management within the Salmon River drainage, to develop common management objectives, facilitate effective treatment and coordinate efforts along logical geographic boundaries with similar landtypes, use patterns and problem species.

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. The need to amendment the Plan was anticipated at the outset. Twenty amendments and one revised amendment have been issued.

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). (10/88)

Amendment #1 (REVISED): Revised Forest Plan Amendment #1 is exactly the same as the original amendment except that the following statement has been removed. The amendment was necessary to settle an appeal of Amendment #1. (1/91)

> "Boundaries may include adjacent areas needed to protect the resources or facilitate management of the river corridor."

Amendment #2: Clarifies the Forest's definition and management of motorized recreation on the Nez Perce National Forest. (10/88)

Amendment #3: Modifies standards listed in Chapter II (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. (3/89)

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. (3/89)

Amendment #5: Corrects errors displayed in the Nez Perce National Forest Plan Appendix A, Forest Fishery/Water Quality Direction by Prescription Watershed. These objectives provide management direction in terms of the maximum estimated increase in sediment over baseline conditions that can be approached or equaled for a specific number of years per decade.

Some of the changes are planning errors made in identifying sediment yield and entry frequency guidelines. Site-specific analysis and stream surveys have also revealed that some streams were incorrectly identified as not supporting anadromous fish. The errors were identified through environmental analysis of proposed timber sales and road construction. An interdisciplinary team was used in identifying the needed changes and proposing the corrections. (3/89)

Amendment #6: Corrects errors in Forest Plan Chapter II (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. (7/89)

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. (1/90)

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. (1/89)

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. (11/90)

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. (1/91)

Amendment #12: Amendment 12 makes minor changes to the Wall Creek Municipal Watershed direction (Management Area 22) contained in the Nez Perce Forest Plan. These changes relate to improving the range of management practices identified in the Forest Plan, and specifically to items such as notifying the Water District if a fire occurs in the watershed and taking special precautions with machinery and chemicals. (2/91)

Amendment #13: Amendment 13 brings the Plan into compliance with legal requirements and Forest Service directives dealing with animal damage control. It should be noted that the amendment does not authorize any specific projects. (4/91)

Amendment #14: 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. (3/91)

Amendment #15: Amendment 15 amends the Frank Church-River of No Return Wilderness Management Plan and the Forest and Land Management Plans for the Bitterroot, Boise, Challis, Payette, Nez Perce, and Salmon National Forests.

The amendment changes wording in the Wilderness Management Plan related to reducing the storage of items and removal of plumbing fixtures from the wilderness. The amendment only modifies the schedule of implementation. (6/91)

Amendment #16: Amendment 16 adopts programmatic changes in management direction for the Selway-Bitterroot Wilderness. These changes should enable wilderness managers to better meet both the letter and the intent of the Wilderness Act. (2/92)

Amendment #17: Amendment 17 allows salvage timber harvest within Management Area 20 (old growth wildlife habitat) following the Scott Fire. Analysis showed that salvage harvest would help to speed up the achievement of old-growth vegetative characteristics in the burned area. This amendment is specific to the Scott Fire salvage sale and will not apply to other areas on the Forest. (4/93)

Amendment #18: Amendment 18 brings the Forest Plan into compliance with a court order which addresses outfitter and guide operations in the Frank Church-River of No Return Wilderness. (7/94)

Amendment #19: Amendment 19 adds more specific management direction for vegetation in the Selway-Bitterroot Wilderness General Management Direction. It establishes goals, objectives, standards and guides and monitoring elements for vegetation within ecosystem management principles. It addresses such issues as: noxious weeds, rare plant protection, vegetative diversity and management of pack and saddle stock. (2/95) [Note: Based on negotiations with appellants, the decision was rescinded in May 1995. A new amendment/decision which provides additional clarification is expected in FY95.]

Amendment #20: The Nez Perce Forest Plan was amended by the Chief of the Forest Service to incorporate an interim strategy for managing anadromous fish-producing watersheds (PACFISH). (2/95)

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 1994. Members of the Forest Interdisciplinary Monitoring Team are designated with an asterisk (*).

UNIT	NAME	AREA OF EXPERTISE
Supervisor's Office	Nick Gerhardt*	Watershed
	Jerry Weigand*	Timber
	Dave Hayes*	Timber Planning and Interdisciplinary Monitoring Team Co-Leader
	Leonard Lake*	Range, Botany and Noxious Weeds
	Roger Ward*	Silviculture
	Nancy Rusho*	Minerals
	Dave Green*	Implementation Analysis and Economics
	MaryAlice Stoner*	Recreation/Wilderness/Rivers
	Ali Abusaidi*	Heritage Resources
	Kent Gilmore*	Fire
	Pat Green *	Soils/Ecology
	Dick Artley *	Land Management Planning and Forest Interdisciplinary Monitoring Team Co-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
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	Ecosystem Planning & Operations Staff Officer
Michael Cook	Forest Engineer, Contracting, Purchasing, & 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	Watershed, Ecology and Biology Staff Officer
Jack Carlson	District Ranger, Salmon River Ranger District
Darcy Pederson	District Ranger, Clearwater Ranger District
Ed Wood	District Ranger, Red River Ranger District
Dennis Dailey	District Ranger, Moose Creek Ranger District
Jerry Bird	Acting 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 1994 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

6/1/95
Date

APPENDIX

NEW ACTION ITEMS IDENTIFIED IN FY 94

The action items listed below are intended to address concerns that were identified during Fiscal Year 1994 monitoring. Given adequate funding and work priority, these action items will be addressed and resolved in fiscal year 95 and beyond.

WILDLIFE

Item 1: As funding permits, the Forest should gather management data to better describe preferred moose winter range characteristics. (page 18 in FY 94 Report)

Item 2: The Forest needs to continue to discuss with the Nez Perce Tribe alternatives to prescribed fire in achieving big game winter range improvements. (page 24 in FY 94 Report).

Item 3: Fisher/pine martin transects need to have consistent annual readings to produce more useful data. (page 29 in FY 94 Report)

Item 4: More funds and staff time needs to be made available to adequately determine goshawk population trends. (page 30 in FY 94 Report)

FISH

Item 1: Monitoring of fish habitat condition needs to be adequately funded, staffed and given a higher priority for accomplishment. (page 38-39 in FY 94 Report)

SOIL AND WATER

Item 1: 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 59 in FY 94 Report).

Item 2: Additional work is needed to improve the quality of placer mining operations in some cases. The lack of specific mandatory "best management practices" is a limitation in achieving this. (page 63 in FY 94 Report).

Item 3: 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. (page 59 in FY 94 Report).

Item 4: Continued development of the NEZSED model and improvements in the reliability of observed sediment yield estimates are needed to improve future land management decisions. (pages 71-72 in FY 94 Report).

RECREATION

Item 1: Implement the National system called Infrastructure, which will be used to improve the gathering and documentation of visitor use information. (page 80 in the FY 94 report).

Item 2: Review and revise recreation opportunity spectrum (ROS) forestwide, incorporate ROS analysis into all environmental analyses and develop a mechanism for updating ROS acreages in the database (page 82 in the FY 94 Report).

Item 3:: The forest needs to develop a systematic method to monitor off-road vehicle (ORV) use and impacts. (page 82 in the FY 94 Report).

Item 4: Establish a system of measurements for more precise monitoring of sites eligible to the National Register of Historic Places. (page 84 of the FY 94 Report).

Item 5: Continue to replace sub-standard signs in the wilderness. (page 87 in FY 94 Report).

Item 6: Continue to strengthen the visual quality program on some Districts. (page 93 in FY 94 Report).

Item 7: The Middle Fk of the Clearwater River Management Plan needs to be updated and the administration of scenic easements needs more emphasis. (page 94 in FY 94 Report).

OTHER MONITORING

Item 1: By the end of FY 95, all facilities on the forest will be surveyed for accessibility for people with disabilities with transition plans developed. (page 128 in the FY 94 Report).

STATUS of ACTION ITEMS IDENTIFIED IN FY 93

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

WILDLIFE

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 in FY 93 Report).

Status: Ongoing

Discussion: Research continues to evolve. We do know that the exclusion of fire in dry, lower elevation ponderosa pine habitats through aggressive fire control has interrupted the natural cycle of frequent interval (5-10 years), low intensity ground fires. These fires served to "thin" the invading fir trees when they are still very small. If left unmanaged, these small trees create what is called "ladder fuels", which provides a pathway for fire to reach the crowns of the pine trees. Prescribed burning under the right conditions and mechanical thinning from below are effective treatments and will be used on the forest in the future.

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 in FY 93 Report).

Status: Ongoing

Discussion: Field monitoring of 4 timber sales in 1993 revealed the Forest Plan snag management guidelines were not being met in all cases. The problem is not with the timber sale contract clauses. The clauses contain adequate language to meet the desired snag numbers.

Retention of an adequate number of snags requires that they be designated as "leave trees" by marking them with paint. It is vital that the intent of the silvicultural prescription be clearly translated into easily understood marking guides. It is also important that the actual marking is reviewed frequently by silviculturalists and biologists to assure the desired end result is being implemented. State and Federal safety requirements are making it more difficult to retain snags in the working area. New OSHA regulations require that each danger tree shall be felled, removed or avoided. Snag marking in the future must consider safety. Marking snags in clumps and marking snags that are least likely to be considered a "danger tree" are options that will be used in the future.

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 in FY 93 Report).

Status: Ongoing

Discussion: This issue was discussed but not resolved with the Nez Perce Tribe in FY 94. It will be a topic for discussion at one of the quarterly Tribal/Forest Service coordination meetings in FY 95.

Item 4: Fisher/pine martin transects need to have consistent annual readings to produce more useful data (page 38 in FY 93 Report).

Status: Incomplete

Discussion: Unfortunately, funding and personnel are in limited supply, thus, tasks for the upcoming year are prioritized for accomplishment. Often times, unforeseen, high priority jobs surface which must be accomplished. A good axample of this situation was the work in FY 94 on ESA Section 7 consultation and the work done for the Upper Columbia River Basin Assessment. As a result, the additional monitoring transects identified for fisher and martin was not accomplished in FY 94.

We will highlight this action item again in the FY 94 Monitoring Report with hopes that its priority will be higher in FY 95.

Item 5: More funds and staff time needs to be made available to adequately determine goshawk population trends (page 39 in FY 93 Report).

Status: Incomplete

Discussion: Unfortunately, funding and personnel are in limited supply, thus, tasks for the upcoming year are prioritized for accomplishment. Often times, unforeseen, high priority jobs surface which must be accomplished. A good axample of this situation was the work in FY 94 on ESA Section 7 consultation and the work done for the Upper Columbia River Basin Assessment. As a result, the additional monitoring to determine goshawk population trends was not accomplished in FY 94.

In an attempt to deal with this situation, we have advertised for qualified ornithological volunteers in the American Birding Association's newsletter. In FY 94 we received no replies. For FY 95, we have secured a volunteer to help get this work done.

We will highlight this action item again in the FY 94 Monitoring Report with hopes that its priority will be higher in FY 95.

FISH

Item 1: Monitoring of fish habitat condition needs to be adequately funded, staffed and given a higher priority for accomplishment (page 47-48 in FY 93 Report).

Status: Ongoing

Discussion: Monitoring fish habitat condition has received more attention in 1994 than in past years. However, the lack of data analysis is the main short-fall in the Fish Habitat Forest Plan Monitoring Station data set. Problems associated with the data base havemade progress in analysis difficult. A single data set is currently being accumulated from the districts, which should facilitate analysis of this data set.

SOIL AND WATER

Item 1: 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 in FY 93 Report).

Status: Ongoing

Discussion: Integrated landscape assessments are underway in the Stillman and Slate Creek projects. The Quartz Meadow landscape assessment is beginning, as is the Upper Red River watershed analysis. Issues identified in the Upper Columbia River Basin Assessment and analytical methods from the same effort will be available within a year and will assist these projects.

Item 2: Mining operations in riparian areas need a consistent approach to 1) describing the pre-mining 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 78 in FY 93 Report).

Status: The particular mining operation that prompted the action item is no longer active and the site has been reclaimed.

Discussion: Since 1992, the Forest has not procesed any mining Plans of Operation that would occur in riparian areas. A consistent approach will be developed and used, but until a Plan of Operation which could affect a riparian area is received and processed other priorities take precedence. In the particular mining operation at issue here, the mined riparian zone was a wetland, which created a great deal of concern.

STATUS OF UNCOMPLETED OR UNRESOLVED ACTION ITEMS IDENTIFIED PRIOR TO FY93

Action Item	Fiscal Years Identified	Current Status	Reason for Current Status	Expected Action Completion
Item 1: The timber stand inventory system(s) must adapt to the linear nature riparian forest stands; the record system should allow grouping of plots between stands into riparian substands. The record system should be adapted to keep track of small riparian acres within stands.	FY 89, FY 90 and FY 92	Unresolved	Stands are delineated on aerial photos based on easily observable characteristics. Often riparian boundaries within the stands are not evident on the photos. To separate these riparian areas from existing stands would be a huge job and likely would invalidate much of the inventory effort. The forest has advanced the idea of adding new fields to the record system to keep track of dual management areas within a single stand, however, this proposal has not been approved.	
			As the forest moves towards more widespread use of GIS technology, we feel that the ability to accurately delineate and analyze riparian areas will become a reality.	By FY 97, the GIS technology (hardware/software) should be sufficient to complete this task.
Item 2: We need to look into the possibility of providing information on our personal use firewood permits to help retain wildlife snags.	FY 91	Completed.	New firewood permits now state: "Do not cut standing dead trees or down logs with signs, tags or paint marks on them." In addition, we have a "Gathering Firewood" brochure which is provided to all who purchase permits. The brochure discusses the importance of wildlife snags and the reasons for not cutting them.	

STATUS OF UNCOMPLETED OR UNRESOLVED ACTION ITEMS IDENTIFIED PRIOR TO FY93 (continued)

Action Item	Fiscal Years Identified	Current Status	Reason for Current Status	Expected Action Completion
Item 3: Review the appropriateness of adding a monitoring element to the Forest Plan addressing the Forest situation regarding commodity vs. non-commodity vegetation.	FY 91	On-going	Under ecosystem management, vegetation with potential commodity use as well as other vegetation will be inventoried and analyzed through the ecosystem assessment process. Historic and existing vegetation will be evaluated and the desired future vegetation conditions will be defined. Progress towards achieving desired vegetative conditions will be monitored.	
Item 4: Develop criteria for evaluating impacts of off-highway vehicle (OHV) use. Determine what is unacceptable change on a transportation system or land base as a result of these uses and user types.	FY 89, FY90, FY 91	Not completed	Lack of funding and the low priority assigned to this task compared with other recreation related work.	Unknown
Item 5: 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 water quality objective.	FY 90	Incomplete	This situation will be corrected through the Forest Plan amendment process. Other higher priority work has delayed progress on this amendment.	Dependant on the Record of Decision date for the Upper Columbia River Basin EIS.

STATUS OF UNCOMPLETED OR UNRESOLVED ACTION ITEMS IDENTIFIED PRIOR TO FY93 (continued)

Action Item	Fiscal Years Identified	Current Status	Reason for Current Status	Expected Action Completion
Item 6: Amend the Forest Plan to incorporate into MA-10 all the riparian area direction that occurs throughout the Forest Plan. Included in that amendment should be the consideration of MA-10 as connecting corridors between old-growth stands.	FY 91	Complete	The Forest Plan has been amended to incorporate the interim PACFISH standards. It is also anticipated that the Upper Columbia River Basin EIS decision will contain riparian standards. These riparian protection measures will be incorporated into the revised 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.

- Cline, R.G., G. Cole, W. Megahan, R. Patton and J. Potyondy, 1981. Guide for Predicting Sediment Yield from Forested Watersheds. USDA Forest Service, Northern and Intermountain Regions.

- Fan, S., (Editor), 1988. Twelve Selected Computer Stream Sedimentation Models Developed in the United States. Subcommittee on Sedimentation, Interagency Advisory Committee on Water Data, Federal Energy Commission, Washington, D.C.

- Gloss, David J., 1995. Evaluation of the NEZSED Sediment Yield Model Using Data from Forested Watersheds in North-Central Idaho. University of Idaho, Master's Thesis, Moscow, ID.