# THIRTEENTH ANNUAL

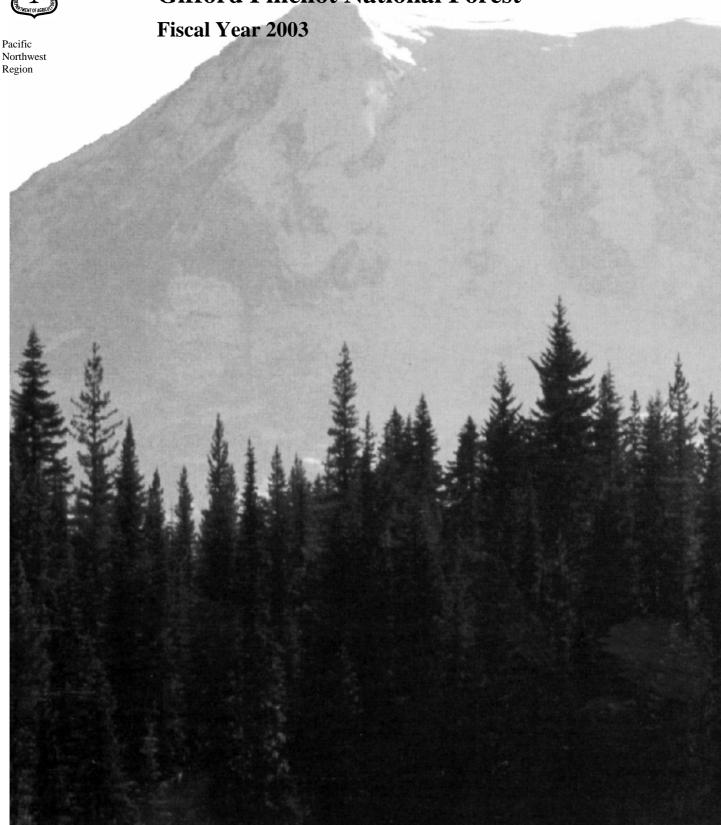
United States Department of Agriculture

Forest Service



# MONITORING AND EVALUATION REPORT

**Gifford Pinchot National Forest** 





Dear Friends and Forest Users,

Have you visited the Forest and wondered about what you saw, or had a question on how the Forest is managed? Many of those questions may be answered by this Annual Monitoring Report. It is a resource to inform and strengthen our understanding of the Forest and of the care it receives.

The primary purpose of this report is to share our success in implementing the goals and objectives of our 1990 Forest Plan as amended by the 1994 Northwest Forest Plan.

Results-at-a-Glance, beginning on page 3 of this report, provides a brief summary of the 30 items monitored and reported on in FY 2003 that relate to Forest Plan goals and objectives. The full reports follow, begin on page 6.

Beginning on page 86 is a report on our effort to involve the public, through our Province Advisory Committee, in monitoring our implementation of the standards and guidelines of the Northwest Forest Plan.

However, there are many other monitoring activities underway on the Forest. We have highlighted a few of those in the section titled Other Monitoring Activities, beginning on page 89.

If you are reading the printed version of this report, it might interest you to know that reports dating back to 1995 are posted on our Internet site with color graphics at http://www.fs.fed.us/gpnf/forest-administration/mgtdir/.

The Forest is undertaking a review of our monitoring program this year. If you have ideas on activities or conditions you believe we should be monitoring, or you would like to participate in monitoring activities, please contact John Roland, Forest Monitoring Coordinator, at (360) 891-5107 or jroland@fs.fed.us.

I hope these reports provide you a greater appreciation of how your Forest is served. All of us have an opportunity to care for the land. Thank you for your contributions in conserving our natural resources.

/s/ Claire Lavendel
CLAIRE LAVENDEL
Forest Supervisor



# Table of Contents

A.	Introduction	2
B. 3	Monitoring Results - At A Glance	3
C. '	Trends in Standard and Guideline Compliance	6
D.	Monitoring Item Results	6
	Wild and Scenic Rivers	7
	Semi Primitive Recreation	7
	Scenic Quality	8
	Wilderness	9
	Trails	11
	Developed and Dispersed Recreation Use and Facility Condition	13
	Heritage	
	Habitat for Raptors and Great Blue Heron	17
	Legacy Features	17
	Survey and Manage	19
	Grazing	21
	Invasive Species (Noxious Weeds)	22
	Research Natural Areas (RNA)	
	Botanical Special Interest Areas	
	Adequate Reforestation	27
	Timber Harvest Methods	29
	Regeneration Harvest Units Size	30
	Timber Volume Awarded	
	Silvicultural Prescriptions	31
	Soil Productivity	33
	Best Management Practices (BMPs)	
	Stream Temperature Monitoring	
	Water Quality Restoration Plans	
	Fish/Riparian S&G Implementation	49
	Effectiveness of Riparian Standards and Guidelines	53
	Proposed, Endangered, Threatened, and Sensitive (PETS) Fish Species	
	In-Channel Habitat Structures	
	Road Management	74
	Community Effects – Payments to Counties	77
	Mining Operating Plans	
E	Accomplishments	82
F. I	Expenditures	84
G.	Forest Plan Amendments	85
Н.	Northwest Forest Plan Implementation Monitoring	86
I. (	Other Forest Monitoring Activities	89
	Mountain Goat Telemetry Study	89
	High Meadow Rehabilitation Project	
	Teachers in the Woods Monitoring Projects	91
J. (	Glossary	102
App	pendix 1 - Stream Temperature Data	107
Pre	oarers	119



# List of Tables

Table 1 Viewshed Condition	8
Table 2 Wilderness Use	10
Table 3 Trail Construction and Maintenance	11
Table 4 Trail Setting	12
Table 5 Survey Categories	19
Table 6 FY 2001 Survey and Manage Results for Fauna	21
Table 7 Research Natural Area Monitoring	23
Table 8 Timber Harvest Methods	
Table 9 Volume sold in FY 2003	30
Table 10 State Stream Temperature Criteria	35
Table 11 Temperature Listed Waterbodies on the Gifford Pinchot	36
Table 12 PETS Fish Species on the Gifford Pinchot National Forest	
Table 13 Roads in Key Watersheds	75
Table 14 2003 Road Construction Projects	76
Table 15 Community Effects—Payments to Counties	77
Table 16 Rural Community Assistance Grants	78
Table 17 Permit Administered	
Table 18 Program Accomplishments	82
Table 19 List of Forest Plan Amendments	
Table 20 Number of birds banded by year and species	94
Table 21 Number of birds banded by year and species.	94



# Acronyms Used in this Document

See the Glossary for definition of terms.

AMA	Adaptive Management Area	NOAA	National Oceanic and Atmospheric Administration
AS	Administrative Site	NOI	Notice of Intent
BMP	Best Management Practices	PAOT	Persons At One Time
AUM	Animal Unit Month	PETS	Proposed Endangered,
BPA	Bonneville Power Administration	1215	Threatened and Sensitive
BSIA	Botanical Special Interest Area	PIG	Policy Implementation Guide
BWR	Biological Winter Range	POO	Plan of Operation
CVRD	Cowlitz Valley Ranger District	RAC	Resource Advisory Committee
DPS	Distinct Population Segment	RNA	Research Natural Area
EIS	Environmental Impact Statement	ROD	Northwest Forest Plan Record of Decision
ESA	Endangered Species Act	ROS	Recreation Opportunity Spectrum
ESU	Evolutionary Significant Unit	RVD	Recreation Visitor Day
FY	Fiscal Year (Oct. – Sept.)	S&G	Standard and Guideline
GIS	Geographic Information System	SPNM	Semi-Primitive Non-Motorized
GPS	Geographical Positioning System	TE&S	Threatened, Endangered and Sensitive
K-V	Knutson-Vandenberg Act	TMDL	Total Maximum Daily Load
LAC	Limits of Acceptable Change	USFS	US Forest Service
LSR	Late-Successional Reserve	USFWS	US Fish and Wildlife Service
LWD	Large Woody Debris	VQO	Visual Quality Objective
MCF	Thousand Cubic Feet	WDFW	Washington Department of Fish and Wildlife
MMBF	Million Board Feet		rish and whome
MSHNVM	Mt. Saint Helens National Volcanic Monument		
IBP	Institute of Bird Populations		
MAC	Management Area Category		
MAPS	Monitoring Avian Productivity		
NEPA	National Environmental Policy Act		



## Monitoring and Evaluation Report

### **Gifford Pinchot National Forest**

Fiscal Year 2003

### A. Introduction

Monitoring and evaluation are important elements in the implementation of the Forest Plan. They are key to making the Plan a dynamic and responsive tool for managing a complex set of natural resources and values in a climate of social and economic change. This document reflects the twelfth year of implementing the Gifford Pinchot National Forest Plan, which was approved on June 1, 1990. It reports Forest activities and accomplishments of fiscal year and compares them to the amended Forest Plan.

The Plan was amended by the Northwest Forest Plan Record of Decision to incorporate new standards and guidelines to ensure protection of late-successional and aquatic ecosystems in April 1994.

### **Monitoring and Evaluation**

There are three types of monitoring:

- 1. **Implementation Monitoring**: determines if goals, objectives, standards and guidelines are implemented as described in the Plan. The question being asked is, "Did we do what we said we would?"
- 2. **Effectiveness Monitoring**: determines if management practices as designed and implemented are effective in meeting the Plan goals and desired future conditions. The concern here is, "Did the management practice accomplish what we intended?"
- 3. **Validation Monitoring**: determines if data, assumptions, and coefficients are accurate. Here, the important question is, "Is there a better way to meet the Plan goals and objectives?"

Our monitoring effort emphasizes implementation monitoring, although several items contain elements of both implementation and effectiveness monitoring.

**Evaluation** is the analysis and interpretation of monitoring results. Essentially, the question being asked in evaluation is, "Are changes needed?" These changes may involve amending or revising the Plan or changing the way activities are implemented.

### **Organization of this Report**:

**Introduction** - This brief overview of what monitoring is about.

Monitoring Results - At a Glance - summarizes monitoring results described in detail in Section D.

**Monitoring Item Results** displays the individual results, evaluations and recommended follow-up actions for all items monitored.

**Accomplishments** show trends in program accomplishments over FYs 1999-2003 and compares accomplishments to our assigned targets (page 82).

Expenditures - Compares expenditures over the last 10 years and the composition of FY 2003 expenditures (page 84).

**Forest Plan Amendments** - Lists all Forest Plan amendments, and briefly describes the content of each, and when it was approved (page 85).

**Northwest Forest Plan Monitoring** - Included is the report from our eighth year of implementation monitoring conducted on the Gifford Pinchot as part of a region-wide monitoring program (page 86).

**Other Monitoring Activities** – This section highlights monitoring activities not directly related to implementation of the Forest Plan (page 89).

**Glossary of Terms** - Definitions of the technical terms used in this document (page 102).



### B. Monitoring Results - At A Glance

The following table briefly summarizes monitoring results by resource area. Detailed information for each monitoring item can be found on the page referenced in Section D, beginning on page 6.

Monitoring items preceded with an asterisk in the table below are all or part effectiveness monitoring, others are primarily implementation monitoring. Refer to the Glossary for meanings of technical terms used in this report.

<b>Monitoring Results - At</b>	A Glance
©	*Wild/Scenic Rivers (page 7– No projects were implemented in W&S Corridors in 2003.
<b>©</b>	*Semi-Primitive Recreation (page 7) – The two projects implemented in the semi-primitive ROS class met standards.
<b>©</b>	*Scenic Quality (page 8) – There were no projects implemented in a scenic viewsheds in 2003. Four viewsheds were monitored.
RECREATION	*Wilderness Use and Condition (page 9) – Wilderness use is up
<b>©</b>	slightly from 2002 levels. In heavily used areas, resource conditions continue to be degraded.
©	*Trail Condition, (page 11) – The two trails monitored met management level standards. User conflicts were reported on fewer than 10 percent of the system trails
<b>©</b>	*Recreation Use and Facility Condition (page 11) – Visitor centers at Mount St. Helens are behind in maintenance due to
	their age and heavy use. Many recreation facilities continue to show the need for reconstruction or heavy maintenance.
HERITAGE	*Heritage Resource Protection (page 15) – Protective measures
RESOURCES ©	were successful in 7 of the 8 historically significant sites in.
©	<b>Raptor Habitat</b> (page 17) No proposed projects had the potential to affect these species or were implemented near known nest sites in 2003.
WILDLIFE (	<b>Legacy Features</b> (page 17) - Objectives for down wood were not met on the Greenhorn Commercial Thin.
<b>①</b>	<b>Survey and Manage</b> (page 19) - 3 amphibian sites and 248 mollusk sites were located.
GRAZING 😐	*Grazing Practices (page 19) – The Ice Caves allotment did not meet the standard of 3 inch stubble height.
*All or part effectiveness	

- ② Standard and guideline met, or no activities to monitor.
- (a) Mixed results or mitigating circumstances.
- Need for improvement.
- ① Information item, not a standard and guideline.

Monitoring Results - A	t A Glance (Continued)
<u>i</u>	Noxious Weeds (page 21) - Noxious weeds were treated on 115 acres
lacksquare	Approximately 2,000 acres were monitored.
BOTANICAL	*Research Natural Areas (page 23) – RNA standards and guideline
9	were met in Butter Creek, Goat Marsh and TT Munger RNAs.
⊕	*Botanical Special Interest Areas (page 23) – Because of vacancie
	in the botany program, botanical special interest area monitoring wa
	not completed in 2003.
<b>©</b>	Adequate Reforestation (page 27) – Three years after planting, 9
	percent of acres monitored were adequately stocked. 212 acres were planted in FY 2003.
<b>①</b>	<b>Timber Harvest Methods</b> (page 29) – Ninty-eight acres wer
U	harvested in 2003.
timber 😊	Regeneration Harvest Units Size (page 30) – No decisions wer
_	signed that contained regeneration units in 2003; there was nothin
	to monitor for this item.
<b>(i)</b>	<b>Volume Awarded</b> (page 30) - In 2001 the Forest awarded 19.2 millio board feet from thinnings. The goal was 18.5 million board feet.
	Silvicultural Prescriptions (page 30) – Thinning objectives were me
<b>©</b>	in young stand and commercial thinnings.
0	Soil Productivity (page 33) – The harvest unit monitored met the
<b>©</b>	standard for protection of soil productivity, less than 0.4 percent of
	the area was adversely impacted.
soil⊕	<b>Best Management Practices</b> (page 33) –One minor departure was
SOIL	found on the Greenhorn Timber Sale.
AND (i)	<b>Stream Temperature</b> (page 35) – Streams in 9 watersheds on the
AND	Forest exceed the state standard for temperature.
WATER (i)	Water Quality Restoration Plans (page 35) - The Forest completed
WAILK	Water Quality Restoration Plan for the Lower Cispus River
	Watershed in 2002
<b>©</b>	Fish/Riparian S&G Implementation (page 49) - All harvest units wer
	implemented in compliance with fish/riparian standards and guidelines.
<b>©</b>	*Effectiveness of Riparian S&Gs (page 53) – In all cases prescribed
	mitigations were followed and appear effective.
FISHERIES (i)	*Steelhead and Bull Trout Populations (page 56) – The steelhead
	count in the Wind River was the highest since 1988. The East Fork Lewis River wild steelhead count was the second highest since 1995.
	The bull trout population in Swift Reservoir was estimated at more than
	double the 10 year average.
<b>©</b>	*Effectiveness of In-Channel habitat Improvement Structures (page
	65) – 100 structures were monitored in 2003.
ROADS ©	Road Management (page 74) - The Forest is at 81 percent of th
KOADS 🗨	projected goal for road closures in Biological Winter Range. 34
	miles of road have been decommissioned since 1994.
*All or part effectiveness m	onitoring.



Monitoring Results - A	t A Glance (Continued)
COMMUNITIES ①	<b>Community Effects - Payments to Counties</b> (page 77) - The U.S. Treasury returned over \$16 million dollars to the six counties with lands within the Forest administrative boundary. The Forest administered \$224 thousand in community assistance grants.
MINING (1)	Mining Operating Plans (page 77) – The Forest administered 25 Notices of Intent and 4 Plans of Operation in 2003. No cases of noncompliance were identified or reported.



# C. Trends in Standard and Guideline Compliance

- Standard and guideline met, or no activities to monitor.
- Mixed results or mitigating circumstances.
- S Need for improvement

-		8	0	7	L	8	į	6	8	8	7	8	6	Plan	3-Year
Standard and Guideline	91	92	93	94	က	96	76	98	99	3	0	70	03	Avg.*	Avg
Wild and Scenic Rivers	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
Semi-Primitive Recreation	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
Scenic Quality	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
Wilderness	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
Research Natural Areas	@	①	①	①	①	①	①	①	①	①	①	①	①	①	①
Trail Condition	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
Recreation Facility	•	①	①	①	①	①	①	①	①	①	①	①	①	①	①
Heritage Protection	①	①	①	①	①	@	①	①	①	①	①	①	①	①	①
Raptor Habitat	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
Botanical SIA	①	①	①	①	①	①	①	①	•	①	•		•	①	①
Legacy Features	@	@	8	@	①	①	①	①	①	①	①	①	①	①	①
Grazing Practices	•			=	•	=		-	①	①	①	①	①	①	①
Reforestation	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
Regeneration Unit Size	①	①	①	①	①	①	①	①	①	①	①	①	①	①	①
Silvicultural Prescriptions	①	①	•	①	①	①	①	①	①	①	①	①	①	①	①
Soil Productivity	①	①	@	@	①	①	①	①	①	①	①	①	①	①	①
Best Management Practicess	@	8	8	@	3	00	①	①	①	①	①	①	①	①	①
Fish/Riparian	•		•	-		-	①	①	①	①	①		①	①	①
Riparian Effectiveness	•			=	•	=	①	①	①	①	①		①	①	①
In-Channel Effectiveness	•			=	•	=	①	①	①	①	①		①	①	①
Road Management	①	<b>③</b>	<b>③</b>	①	①	<b>①</b>	①	①	①	①	①	①	①	①	①
S&G Average	<b>©</b>	0	<b>①</b>	<b>①</b>	0	0	<b>③</b>	<b>③</b>	<b>③</b>	0	0	<b>③</b>	<b>③</b>	0	<b>③</b>