

Table of Contents

Front Material

| | |
|---|--------------------|
| List of Acronyms and Abbreviations Used | inside front cover |
| Abstract | i |
| Preface | ii |
| Acknowledgments | iv |

| | |
|--------------------------------|-----|
| Executive Summary | S-1 |
|--------------------------------|-----|

Map Section

| | |
|--|--|
| Oregon Department of Forestry Western Oregon Districts | |
| Astoria District | |
| Forest Grove District | |
| Tillamook District | |
| Clackamas-Marion District | |
| West Oregon District | |
| Western Lane District | |
| Oregon Ecoregions | |

Chapter 1. Purpose, History, and Planning

| | |
|---|------|
| Purpose and Scope | 1-1 |
| Location and Terminology | 1-2 |
| History | 1-5 |
| Management Planning for State Forests | 1-14 |

Chapter 2. Understanding the Forest: Planning and Resources

| | |
|---|------|
| The Northwest Oregon State Forests Planning Process | 2-3 |
| Resource Descriptions | 2-11 |
| Agriculture and Grazing | 2-12 |
| Air Quality | 2-13 |
| Biodiversity and Disturbance History | 2-16 |
| Cultural Resources | 2-24 |
| Energy and Mineral Resources | 2-26 |
| Fish and Wildlife | 2-28 |
| Forest Health | 2-39 |
| Geology and Soils | 2-46 |
| Land Base and Access | 2-52 |
| Plants | 2-61 |
| Recreation | 2-64 |

Chapter 2. Understanding the Forest: Planning and Resources (cont.)

| | |
|-------------------------------------|------|
| Scenic Resources | 2-72 |
| Social and Economic Resources | 2-74 |
| Special Forest Products | 2-78 |
| Timber | 2-80 |
| Water Resources | 2-84 |

Chapter 3. Guiding Principles, Vision, and Goals

| | |
|---------------------------------|------|
| The Guiding Principles | 3-2 |
| The Forest Vision | 3-9 |
| Resource Management Goals | 3-12 |
| Working Hypotheses | 3-18 |

Chapter 4. Resource Management Concepts and Strategies

| | |
|--|-------|
| Introduction | 4-3 |
| Basic Concepts for Integrated Forest Management | 4-5 |
| Basic Concepts for Landscape Management | 4-7 |
| Basic Concepts for Aquatic and Riparian Conservation | 4-31 |
| Basic Concepts for Forest Health | 4-42 |
| Integrated Forest Management Strategies | 4-45 |
| Landscape Management Strategies | 4-47 |
| Aquatic and Riparian Strategies | 4-59 |
| Forest Health Strategies | 4-77 |
| Strategies for Species of Concern | 4-81 |
| Strategies for Specific Resources | 4-85 |
| Agricultural and Grazing Resources | 4-86 |
| Air Quality | 4-88 |
| Cultural Resources | 4-90 |
| Energy and Minerals | 4-94 |
| Land Base and Access | 4-96 |
| Plants | 4-99 |
| Recreation | 4-101 |
| Scenic Resources | 4-105 |
| Soils | 4-108 |
| Special Forest Products | 4-110 |

Chapter 5. Implementation

| | |
|---|------|
| Implementation Guidelines | 5-2 |
| Asset Management Guidelines | 5-7 |
| Adaptive Forest Resource Management | 5-13 |
| Basic Concepts for Adaptive Management | 5-14 |
| Strategies for Implementing Adaptive Management | 5-22 |
| Public Involvement in Implementation | 5-35 |

Appendices

| | |
|---|------|
| A. Glossary | |
| B. References | |
| C. Concepts for the Integrated Strategies | |
| Stand Type Definitions | C-2 |
| Landscape Management Principles | C-16 |
| Concepts for the Landscape Management Strategies | C-22 |
| Silvicultural Practices | C-46 |
| D. Legal and Policy Mandates | |
| Board of Forestry Land | D-2 |
| Common School Forest Land | D-5 |
| Comparison of State and Federal Management Mandates | D-10 |
| Other Legal Mandates | D-12 |
| Mandates for Specific Resources | D-21 |
| E. Wildlife: Species Lists, Status, and Habitat | |
| F. Public Involvement | |
| History of Public Involvement | F-2 |
| G. State Lands Research Policy | |
| H. History of the Northwest Oregon State Forests | |
| I. Decadal Analysis of Alternatives | |
| J. Management Standards for Aquatic and Riparian Areas | |
| K. Management of State Forest Lands | |
| Oregon Administrative Rules Chapter 629, Division 35 | |

Tables

| | |
|---|------|
| S-1. Stand Structure Types: Percent of the Landscape | S-16 |
| 2-1. Summary of Mineral Resource Occurrences, Production, and Potential .. | 2-27 |
| 2-2. Spotted Owl Sites on Northwest Oregon State Forests, in 1999 | 2-31 |
| 2-3. Listed Fish and Wildlife Species and Species of Concern on or near State Forest Lands | 2-32 |
| 2-4. Listed, Proposed, or Sensitive Fish Species in the Northwest Oregon State Forests | 2-35 |
| 2-5. Oregon Department of Forestry Administrative Districts in Northwest Oregon | 2-53 |
| 2-6. Access System: Miles of Roads and Designated Trails | 2-59 |
| 2-7. Base List of Plant Species of Concern | 2-62 |
| 2-8. Projected Distribution of Revenue from Clearcutting or Partial Cutting One Thousand Board Feet of Timber from Board of Forestry Lands | 2-77 |

Tables (continued)

| | | |
|------|--|-------|
| 2-9. | Percent of County, School, and Other Local Taxing Districts Budgets Derived from State Forest Revenues, in Clatsop and Tillamook Counties, Fiscal Year 1995-1996 | 2-77 |
| 2-10 | Summary of Conifer Age Classes, by District | 2-83 |
| 4-1. | Relationships between Stand Type Definitions and Stand Development Processes | 4-12 |
| 4-2. | Stand Structure Types: Percent of the Landscape in Each District | 4-48 |
| 4-3. | Cultural Resource Classes and Objectives | 4-92 |
| 4-4. | Scenic Classifications and Management Objectives | 4-107 |
| 5-1. | Value of Land and Standing Timber, by District (Board of Forestry Lands) | 5-12 |
| 5-2. | Value of Land and Standing Timber, by District (Common School Lands) | 5-12 |
| 5-3. | Effecting Change | 5-23 |
| 5-4. | Decision-Makers for the Four Planning Levels | 5-24 |
| 5-5. | Adaptive Management Review Team Membership | 5-29 |
| C-1. | Relationships between Stand Type Definitions and Stand Development Processes | C-3 |
| C-2. | Similarity Coefficients between Stand Structure Types | C-20 |
| C-3. | Comparison between Landscape Patch Types and Stand Types | C-28 |
| C-4. | Matrix of Planning Decisions Appropriate at Various Scales of Landscape Planning | C-30 |
| C-5. | Example: Summary of Patch Sizes for the Tillamook State Forest | C-31 |
| F-1. | Chronological History of Public Involvement | F-3 |
| J-1. | Management Standards for Type F Stream RMAs | J-7 |
| J-2. | Management Standards for Type N Stream RMAs | J-8 |
| J-3. | Management Prescriptions for Lakes, Ponds, and Wetlands | J-15 |
| J-4. | Management Prescriptions for Estuaries, Bogs, Seeps, and Springs | J-16 |

Figures

| | | |
|------|---|------|
| S-1. | Five Elements of Planning for Oregon State Forests | S-3 |
| 1-1. | Five Elements of Planning for Oregon State Forests | 1-14 |
| 2-1. | Prescribed Burning Trend on Northwest Oregon State Forests: Tons of Fuel Burned | 2-15 |
| 2-2. | Prescribed Burning Trend on Northwest Oregon State Forests: Number of Acres Burned | 2-15 |
| 2-3. | Land Ownership in the Northwest Oregon State Forests | 2-52 |
| 2-4. | Distribution of State Forest Lands Across Districts | 2-53 |
| 2-5. | Management Organization | 2-54 |
| 2-6. | Summary of Conifer Age Classes, by District | 2-83 |
| 4-1. | State Forest Plans and Policies: Planning Hierarchy and Key Products | 4-4 |
| 5-1. | The Six Steps of Adaptive Management | 5-16 |
| C-1. | Stand Type 1 — Regeneration (REG) | C-4 |
| C-2. | Stand Type 2 — Closed Single Canopy (CSC) | C-6 |
| C-3. | Stand Type 3 — Understory (UDS) | C-8 |
| C-4. | Stand Type 4 — Layered (LYR) | C-10 |
| C-5. | Stand Type 5 — Older Forest Structure (OFS) | C-12 |
| C-6. | Change in Patch Characteristics at Different Scales | C-17 |
| C-7. | A Landscape with Increasing Habitat Fragmentation | C-18 |
| C-8. | Frequency Distribution of IHA Patch Sizes for the Tillamook State Forest | C-32 |
| C-9. | Example: Patch Placement in a Drainage | C-34 |