

Resources

Cultural Resources

Separate from the Forest Practices Act, archaeological sites are protected under chapter 27.53 RCW; and Native American graves, cairns, and glyptic records are protected under chapter 27.44 RCW. Historic cemeteries and graves are protected under chapter 68.60 RCW.

The Department of Archaeology and Historic Preservation (DAHP) is the primary contact for the two historic registers (National Register of Historic Places and the Washington Heritage Register) that track Washington's historic and cultural resources.

Department of Archaeology and Historic Preservation

1110 S. Capitol Way
Suite 30
Olympia WA 98501
360-586-3065
<http://www.dahp.wa.gov/>

State Laws (Partial List)

Chapter 27.44 RCW Indian Graves and Records
Chapter 27.53 RCW Archaeological Sites and Resources
Archaeological Excavation and Removal Permit
RCW 27.53 WAC 25 – 48)

Chapter 68.60 RCW Abandoned and Historic Cemeteries and Historic Graves

No person may knowingly remove, alter, dig into, excavate, deface or destroy any historic or prehistoric archaeological resource without a permit from the Department of Archaeology and Historic Preservation. Violation of chapter 27.53 RCW or chapter 27.44 RCW is subject to criminal and civil penalties.

State laws can be found online at:

<http://www1.leg.wa.gov/lawsandagencyrules/>

Washington County and City Government Laws

Chapter 36.70A.020 (13) Growth Management Act (GMA)

One of the Growth Management Act's (GMA) planning goals includes, "Identify and encourage the preservation of lands, sites, and structures that have historical, cultural, and archaeological significance." Although the GMA does not require a historic preservation or cultural resources element in a comprehensive plan, cities and counties planning under the GMA must consider and incorporate the historic preservation goal. For information about your city or county please contact your city, county, or DAHP.

Municipal Research and Services Center of Washington at <http://mrsc.org/Home.aspx>

Local ordinances for counties and cities can be found at:
<http://www.mrsc.org/codes.aspx>

Federal Laws

The National Park Service provides a link to federal laws at: <https://www.fedcenter.gov/programs/cultural/>

Forest Roads

Washington State Department of Natural Resources (DNR)

Forest Practices
1111 Washington St SE
MS 47012
Olympia, WA 98504-7012
Phone (360) 902-1400
Fax (360) 902-1428
FPD@dnr.wa.gov

Information on road design, location, drainage, maintenance, technical assistance on designing water crossing structures, technical assistance for typing streams, is available at local DNR region offices: <http://www.dnr.wa.gov/programs-and-services/forest-practices>

WSU Extension Forestry

600 128th St. SE
Everett, WA 98208
Phone: (425-357-6017
<http://forestry.wsu.edu/>

Consulting Foresters

► Contact a consulting forester or forest engineer for information on road and stream crossing design and layout.

(Directory of Consulting Foresters is available from WSU Cooperative Extension office)

<http://forestry.wsu.edu/consultingdirectory/>

Oregon State University Extension Service

Ag. Communications
Oregon State University
Administration Services
101 Ballard Hall
Corvallis, OR 97331-3606
Phone: (541) 737-2513
<http://extension.oregonstate.edu/>

Selected Publications Available:

Planning Woodland Roads (EC 1118)
Road Construction on Woodland Properties (EC 1135)
Designing Woodland Roads (EC 1137)
Maintaining Woodland Roads (EC 1139)
Hauling Logs from Woodland Properties (EC 1140)

Washington State Department of Fish and Wildlife

WDFW Main Office
Natural Resources Building
1111 Washington St. SE
Olympia, WA 98501
Phone (360) 902-2200
TDD (360) 902-2207
wdfw.wa.gov

Mailing Address

600 Capitol Way N.
Olympia, WA 98501-1091

- Assistance with identifying priority habitats and species of interest
- Technical assistance on designing water crossing structures
- Technical assistance for typing streams

Timber Harvest

Washington State Department of Transportation (DOT)

WSDOT Aerial Photo Sales
Aerial Photography Branch

Walk-in: 310 Maple Park Avenue SE
Olympia, WA 98504-7300

Fax your request to: (360) 709-5599

Phone: (360) 709-5550

Web: <http://www.wsdot.wa.gov/mapsdata/products/digitalmapsdata.htm>

Be prepared to provide a description of your area of interest by section, township, range and 1/4 section, if possible.

Washington State Department of Natural Resources

Resource Aerial Photography, Orthophotos
Photo & Map Sales (via fulfillment office
at Department of Printing)

<http://www.dnr.wa.gov/programs-and-services/buy-maps-aerial-photos-or-survey-data>

Available from DNR region office:

<http://www.dnr.wa.gov/programs-and-services/forest-practices>

- ▶ Questions about Forest Practices Rules and assistance with applications
- ▶ Consulting Foresters Directory

Selected Publications Available:

- ▶ Guidelines for Selecting Reserve Trees
- ▶ Recognizing Wetlands and Wetland Indicator Plants on Forest Lands

Washington Contract Loggers Association

P.O. Box 2168
Olympia, WA 98507-2168
Phone: (360) 352-5033

1 (800) 422-0074

<http://www.loggers.com/default.asp>

- ▶ List of Accredited Loggers
- ▶ Logger training and accreditation programs

USDA Natural Resources Conservation Service

(Check telephone directory for local office)

<http://www.wa.nrcs.usda.gov/>

- ▶ County Soil Survey (book describing soil types and limitations related to forestry operations)

Washington State Department of Archaeology and Historic Preservation

1110 S. Capitol Way, Suite 30
Olympia WA 98501

Phone: (360) 586-3065

Fax: 360-586-3067

<http://www.dahp.wa.gov/>

- ▶ Information and assistance regarding cultural, historic, and archaeological resources.

Selected Publications Available for Review

Online at: <http://http://www.dahp.wa.gov/>

- ▶ A Field Guide to Washington State Archaeology
- ▶ Washington State Standards for Cultural Resource Reporting
- ▶ DAHP Mitigation Options and Documentation Standards
- ▶ A Citizen's Guide to Protecting Historic Places: Local Preservation
- ▶ National Register vs. Local Register
- ▶ Washington State Growth Management Historic Preservation: A Tool for Managing Growth

Washington State University Cooperative Extension

600 128th St. SE

Everett, WA 98208

Phone: (425-357-6017)

<http://forestry.wsu.edu/> Educational workshops for forest owners and loggers

- ▶ Educational workshops for forest owners and loggers

Sample of Selected Publications Available Online at:

<http://ext.wsu.edu/forestry>

- ▶ Managing Your Timber Sale (EB 1818)
- ▶ Consulting Foresters Directory (EB 1303)
- ▶ Forest Stewardship: A Handbook for Washington Forest Landowners (MISC 0155)

Oregon State University Extension Service

Ag. Communications
Oregon State University
Administration Services
101 Ballard Hall
Corvallis, OR 97331-3606
Phone: (541) 737-2513
<http://extension.oregonstate.edu/>

Sample of Selected Publications Available Online at:

<https://catalog.extension.oregonstate.edu/>

- ▶ The Impact of Timber Harvest on Soil and Water Resources (EB 827)
- ▶ Timber Harvesting Options (EC 858)
- ▶ Logging Woodland Properties (EC 956)
- ▶ Thinning to Prevent Mountain Pine Beetle in Lodgepole and Ponderosa Pine (EC 1106)
- ▶ Soil Compaction on Woodland Properties (EC 1109)
- ▶ Designated Skid Trails Minimize Soil Compaction (EC 1110)
- ▶ Enhancing Wildlife on Private Woodlands (EC 1122)
- ▶ Felling and Bucking Techniques for Woodland Owners (EC 1124)
- ▶ Management Planning for Woodland Owners: Why and How (EC 1125)
- ▶ Hauling Logs from Woodland Properties (EC 1140)
- ▶ Soil and Water Conservation: An Introduction for Woodland Owners (EC 1143)
- ▶ How to Manage Your Own Timber Sale: Guidelines for Success (EC 1487)

University of Idaho Cooperative Extension System

University of Idaho Extension
875 Perimeter Drive MS 2338
Moscow, ID 83844-2338
Phone: 208-885-5883
Fax: 208-885-6654
Email: extension@uidaho.edu

Selected Publications Available:

- ▶ Forestry Best Management Practices for Idaho (EXT 745)
- ▶ Are Your Streams Healthy? Stream Quality Survey for Managing Private Forest Ecosystems (SB 61)
- ▶ Diameter Limit Cutting: A Questionable Practice (CIS 630)
- ▶ Calculating Timber Removal Costs Under Ecosystem Management (SB 62)
- ▶ Contracting for Timber Harvest Under Ecosystem Management (SB 63)
- ▶ Selling Woodland Timber: Contract Decisions (EXT 759)
- ▶ Evaluating Wildlife Habitat for Managing Private Forest Ecosystems in the Inland Northwest (SB 60)

Selected videos Available:

- ▶ Forest Water Quality (7027)
- ▶ I Want To Log Selectively: A Practical Guide to Partial Timber Harvesting (755)

Washington State Department of Fish and Wildlife

WDFW Main Office
Natural Resources Building
1111 Washington St. SE
Olympia, WA 98501
Phone: (360) 902-2200
TDD (360) 902-2207
<http://wdfw.wa.gov/>

Mailing Address

600 Capitol Way N.
Olympia, WA 98501-1091

- ▶ Assistance with identifying priority habitats and species of interest
- ▶ Issue Hydraulics Project Approval permits (HPAs). Check with local region office.
- ▶ Technical assistance on designing water-crossing structures
- ▶ Technical assistance for typing waters

Reforestation

Washington State Department of Natural Resources (DNR)

Available from DNR region office:
<http://www.dnr.wa.gov/programs-and-services/forest-practices>

Stewardship foresters can provide technical advice on site preparation, reforestation, animal damage control, and on-site consultations about forest management.

Forest Practices coordinators can answer questions about compliance with Forest Practices Rules.

Selected publication available:

- ▶ Planting Forest Seedlings: How to Select, Plant, and Care for Tree Seedlings

WSU Extension Forestry

600 128th St. SE
 Everett, WA 98208
 Phone: (425-357-6017)
<http://forestry.wsu.edu/>

Contact a Forestry Extension Agent for technical advice on site preparation, reforestation, or animal damage control.

Selected Publications Available:

- ▶ Plant Your Trees Right (PNW 0033)

University of Idaho Cooperative Extension System

Ag. Communications Building, J40
 Idaho Street
 University of Idaho
 Moscow, ID 83843-4196
 Phone: (208) 885-7982
<http://www.uidaho.edu/extension/>

Selected Publications Available:

- ▶ Choosing Nursery Stock for Landscaping, Conservation and Reforestation (CIS 923)

Oregon State University Extension Service

Ag. Communications
 Oregon State University
 Administration Services
 101 Ballard Hall
 Corvallis, OR 97331-3606
 Phone: (541) 737-2513
<http://extension.oregonstate.edu/>

Selected Publications Available:

- ▶ Successful Reforestation: An Overview (EC 1498)
- ▶ The Care and Planting of Tree Seedlings on Your Woodland (EC 1504)
- ▶ Seedling Care and Handling (EC 1095)
- ▶ Site Preparation: An Introduction for the Woodland Owner (EC 1188)
- ▶ Selecting and Buying Quality Seedlings (EC 1196)
- ▶ Reforestation Planning Guide: Helping Insure Reforestation Success for Woodland Owners (EM 8241)
- ▶ Understanding and Controlling Deer Damage in Young Plantations (EC 1201)

WEST SIDE

Webster Forest Nursery

Webster Forest Nursery
 9805 Blomberg Street SW
 Tumwater, Washington 98512
 Phone: (877) 890-2626
<http://www.dnr.wa.gov/programs-and-services/forest-resources/webster-forest-nursery>

EAST SIDE

UI Pitkin Forest Nursery

1025 Plant Science Rd
 Moscow, Idaho 83843
 Phone: (208) 885-3888
 Fax: (208) 885-6564
 (specify nursery)
 Email: seedlings@uidaho.edu
<https://www.uidaho.edu/cnr/cfnr/pitkin>

Forest Chemicals

Washington State Department of Natural Resources (DNR)

Available Online at:
<http://www.dnr.wa.gov/BusinessPermits/ForestPractices/>

Washington State Department of Agriculture (WSDA)

1111 Washington Street SE
 MS 42560
 Olympia, WA 98504-2560
 Phone: (360) 902-1800 or TDD (360) 902-1996
agr.wa.gov/

- ▶ Pesticide registration
- ▶ Pesticide applicator licensing program
- ▶ Enforcement of label requirements

Washington State Department of Ecology (ECY)

Physical address:

300 Desmond Drive
 Lacey, WA 98503
 Phone: (360) 407-6000 or TDD (800) 833-6388
<http://www.ecy.wa.gov>

Mailing address:

PO Box 47600
 Olympia, WA 98504-7600

- ▶ Chemical spills
- ▶ Disposal requirements

WSU Extension Forestry

600 128th St. SE
 Everett, WA 98208
 Phone: (425-357-6017)
<http://forestry.wsu.edu/>
<http://forestry.wsu.edu/>

- ▶ Pesticide applicator training courses

Selected Publications Available:

- ▶ Protecting Groundwater from Pesticide Contamination (EB 1644)
- ▶ Washington Pesticide Laws and Safety (MISC 0056)
- ▶ Private Applicators Pesticide Education Manual (MISC 0126)

- ▶ WSU Pesticide Study Materials Order Form (CO 886)
- ▶ Pesticides: Learning about Labels (MISC 0191)
- ▶ Pesticides: Safe Handling (MISC 0192)
- ▶ Forest Environment Pesticide Study Manual (MISC 0183)
- ▶ Pesticide Handlers and the Workers Protection Standard (VT0066), also available in Spanish
- ▶ PNW Weed Management Handbook (MISC 0049)
- ▶ PNW Insect Management Handbook (MISC 0047)
- ▶ PNW Plant Disease Management Handbook (MISC 0048)
- ▶ Fertilizing Coastal Douglas-fir Plantations (EB 1800)

Oregon State University Extension Service

Ag. Communications
 Oregon State University
 Administration Services
 101 Ballard Hall
 Corvallis, OR 97331-3606
 Phone: (541) 737-2513
extension.oregonstate.edu

Selected Publications Available:

- ▶ Calibrating and Using Backpack Sprayers (PNW 320)
- ▶ Introduction to Conifer Release (EC 1388)
- ▶ How Soil Properties Affect Groundwater Vulnerability to Pesticide Contamination (EM 8559)

General Forest Management

Washington State Department of Natural Resources (DNR)

Stewardship Program

- ▶ Backyard Forest Stewardship kits can be requested by e-mailing forest_stewardship@dnr.wa.gov or by calling: 360-902-1706.
- ▶ Stewardship foresters and a wildlife biologist are available to provide on-site forest management advice customized to individual landowner needs.

DNR Forest Stewardship Program

1111 Washington St SE
MS 47012
Olympia, WA 98504-7012
Phone: (360) 902-1706
FAX: 360-902-1428
foreststewardship@dnr.wa.gov

Small Forest Landowner Office

1111 Washington St SE
MS 47012
Olympia, WA
98504-7012
sflo@dnr.wa.gov

- ▶ Resource for small forest landowner concerns and policies. Promotes the economic and ecological viability of small forest landowners.

Selected Publications Available On-line at:

<http://www.dnr.wa.gov/sflo>

WSU Extension Forestry

Natural Resource Sciences
600 128th St. SE
Everett, WA 98208
Phone: (425-357-6017)
<http://forestry.wsu.edu>

- ▶ Provides educational programs and materials for forest owners, loggers, and resource professionals. Check with your local County Extension Office for a list of publications and information about forestry education programs in your area.

Selected Publications Available Online at:

<http://ext.wsu.edu/forestry>

Consulting Foresters Directory

Association of Consulting Foresters (ACF)
Certified Consultants
Forest Health in the Northwest

Selected Publications Available:

- ▶ Forestry Education and Assistance Programs for Washington Landowners (EB 1286)
- ▶ Terminology for Forest Owners (EB 1353)
- ▶ Forest Stewardship: A Handbook for Washington Forest Landowners (MISC 0155)
- ▶ Forest Stewardship Planning Workbook (PNW 0490)

Oregon State University Extension Service

Ag. Communications
Oregon State University
Administration Services
101 Ballard Hall
Corvallis, OR 97331-3606
Phone: (541) 737-2513
extension.oregonstate.edu

Selected Publications Available:

- ▶ Forest Ecosystem Stewardship (EM 8676)
- ▶ Backyard Woodlands: Caring for Trees, Forests, Water, and Wildlife on Small Forested Acreage (EM 8745)

Montana State University Cooperative Extension Service

PO Box 172040
115 Culbertson Hall
Montana State University
Bozeman, MT 59717-223
Phone: (406) 994-1750
msuextension@montana.edu

Selected publication available:

- ▶ Forest Ecosystem Stewardship (EB 0141)

Other Regulations that Apply to Forestry Operations

This list does NOT include all permits that may be needed. Verify all permits needed for your forestry operation by contacting city, county, state, and federal agencies, as well as Tribal governments.

For an idea of what permits you may need, visit the Office of Regulatory Assistance at:

www.oria.wa.gov/site/alias__oria/368/default.aspx, call (800) 917-0043, or email help@oria.wa.gov to set up an appointment with a caseworker to help you identify which permits you may need.

Wetland Permit (local, state, or federal government requirements)

Working in or near wetlands, areas that are transitional between open water and uplands or that may be periodically inundated or saturated.

Surface Mining Permit (Department of Natural Resources Surface Mining Program)

May be required for rock pits and quarries.

Burn Permit (Department of Natural Resources)

Required for burning forest slash piles.

State Environmental Policy Act (Department of Natural Resources & Department of Ecology)

Required if adverse environmental impacts are identified in association with a forest practices activity.

Construction Stormwater General Permit (Department of Ecology)

May be required if you disturb one or more acres of land in association with a land conversion.

Shorelines Permit (County Planning Department)

May be required if harvesting is proposed within 200' of major waterways such as rivers, lakes, and salt water.

Clearing and Grading Permit (County Planning Department)

County regulations apply to harvested lands that are being converted to non-forest use.

Other County Regulations (County Planning Department or Environmental Division)

Some counties may have additional requirements.

Road Permits (County or State Highway Department)

Needed to connect a logging road to a public road.

Special Forest Products Permit (County Sheriff)

Required to transport special forest products such as Christmas trees, boughs, and cedar bolts on public roadways.

Tree Removal Permit (City)

Some cities have ordinances regarding tree removal within city limits.

Pesticide Applicators License (Washington State Department of Agriculture)

Required to buy or apply Restricted Use Pesticides or to apply pesticides for hire.

Forest Contractors License (Washington State Department of Labor and Industries)

Required of contractors who do forestry work for hire.

Cultural Resources (Department of Archaeology and Historic Preservation)

▶ Archaeological Excavation Permit <http://http://http://www.dahp.wa.gov/archaeological-permitting>.

▶ Required for excavating, altering, defacing, or removing archaeological objects or resources or Native Indian graves, cairns or glyptic records.

▶ No person may knowingly remove, alter, dig into, excavate, deface or destroy any historic or prehistoric archaeological resource without a permit from the Department of Archaeology and Historic Preservation. Violation of chapter 27.53 RCW or chapter 27.44 RCW is subject to criminal and civil penalties.

Small Forest Landowner Office

Washington's small forest landowners own and manage approximately 4 million acres of forest land and account for nearly 30 percent of the timber harvested in the state. They play a significant role in supporting rural economies and are essential to the conservation of wildlife habitat, clean water and other public resources.

The small forest landowner community is comprised of a diverse array of ownerships. Small woodlots, ranging from five to more than 1,000 acres, are owned and managed by families, small businesses, non-profits, land trusts, and other types of owners.

People choose to become small forest landowners for many reasons, including: enjoying the scenic and aesthetic values of forests, protecting nature, making a long-term investment and creating a legacy for their families.

Owning and managing forest land also brings with it a host of challenges. Changing forest management regulations, fluctuating timber markets, real estate development pressures and limited public recognition of the value of small forestlands can combine to make forestry a difficult undertaking at the small scale.

The Small Forest Landowner Office

The Small Forest Landowner Office (SFLO) was created in 2000 to serve as a resource for small woodlot owners. The office provides technical assistance and administers incentive-based programs that aid Washington's privately owned, non-industrial forest landowners.

With field foresters located around the state, the SFLO delivers on-site assistance to landowners who have questions about how to manage their forests to meet the resource protection goals of the Forest Practices Rules.

Programs and services include:

Forestry Riparian Easement Program

A voluntary compensation program that reimburses eligible landowners for a minimum of 50 percent of the value of the trees they must, by law, leave in riparian areas to protect riparian function, including water quality and wildlife habitat.

Family Forest Fish Passage Program

A cost-share program that provides 75 to 100 percent of the cost of repairing, replacing or removing fish barriers such as culverts, dams, weirs, spillways or other artificial instream structures that block fish from migrating to upstream habitat.

General Technical Assistance

The SFLO and its field staff are available to assist landowners with making forest management decisions near sensitive ecological areas such as streambanks, wetlands and unstable slopes.

Other Government Financial and Technical Assistance

Many state and federal agencies provide financial and technical assistance to small forest landowners for conservation practices. The SFLO maintains a list of these programs and can aid landowners with identifying the most appropriate program to meet their needs.

Website

The SFLO maintains a comprehensive website with information on its programs and other government and non-government resources. Find more on the web at: <http://www.dnr.wa.gov/sflo>

Acronyms

While many of these acronyms are not used in this publication, they are used when conducting forest practices activities.

ALP Accredited Logger Program

ALTC Area Likely to Convert (FPAs in ALTCs are processed as class IV-general)

BFW Bankfull width (used during stream typing)

CBW Channel bed width

CMER Cooperative Monitoring, Evaluation and Research (TFW committee)

CMZ Channel Migration Zone

COHP Conversion Option Harvest Plan (may allow applicant to submit FPA in a designated ALTC as a class II or III, rather than class IV-general)

DAHPP (Washington) Department of Archaeology and Historic Preservation

DNR (Washington) Department of Natural Resources

ECY (Washington) Department of Ecology

EIS Environmental Impact Statement

FPA/N Forest Practices Application/Notification

PCHB Pollution Control Hearings Board

FPARS Forest Practices Application Review System

FPB Forest Practices Board (adopts Forest Practices Rules — WACs)

FPF Forest practices forester

FPHP Forest Practices Hydraulic Project

GRT Green recruitment tree

HPA Hydraulics Project Approval (a permit required from WDFW)

IC Informal Conference (meeting between DNR forester and landowner and/or operator)

ICN Informal Conference Notes (documents IC)

ID TEAM Interdisciplinary Team (Meets on-site to review a proposed forest practice, typically includes landowner, operator, DNR Forester, tribal representative, WDFW, ECY, and USFWS.)

L&I (Washington Department of Labor and Industries)

LOD Large organic debris (used interchangeably with LWD)

LWD Large woody debris (used interchangeably with LOD)

MDNS Mitigate Determination of Non-Significance (after a SEPA checklist is reviewed, a MDNS means the proposal could have adverse environmental impact but may proceed if proposal is mitigated)

NCNU Notice of Conversion to Non-forestry Use

NOID Notice of Intent to Disapprove

NSO Northern Spotted Owl

NTC Notice to Comply (enforcement order directing operator or landowner to take action)

RCW Revised Code of Washington

RMZ Riparian management zone (area along streams and rivers designated for restricted forest practices use)

RUP Road use permit

SASSI Salmon and Steelhead Stocks Inventory (lists regional waters with depressed fish stocks)

SEPA State Environmental Policy Act (requires a checklist be completed and reviewed for all class IV FPA/N)

SMA Shoreline Management Act

SOSEA Spotted Owl Special Emphasis Area

SWO Stop Work Order (enforcement order requiring operator to stop work immediately)

T&E Threatened and endangered (species)

TFW Timber, Fish and Wildlife (industry, Tribes, state agencies and environmental groups working together cooperatively through agreements and committees)

U&A Usual and Accustomed areas (legally designated areas where Native American Tribes have treaty rights to harvest various natural resources)

WAC Washington Administrative Code (rules/regulations)

WAU Watershed Administrative Unit (areas, defined by DNR, in which watershed analysis may be conducted)

WDFW Washington Department of Fish and Wildlife

WMZ Wetland management zone (area surrounding a wetland where forest practices are restricted)

WRT Wildlife reserve tree (also referred to as a snag)

WSDA Washington State Department of Agriculture

Glossary

**This Glossary is to help you understand terms used in this book.
For exact legal definitions, see the Forest Practices Rules.**

Abandoned Road: A forest road that is permanently closed, stabilized, and no longer passable by 4-wheel highway vehicles. Abandonment requests must be submitted in writing and approved by the Department of Natural Resources.

Aerial Application: Applying chemicals from the air by helicopter or plane.

Affected Indian Tribe: Any Indian Tribe that requests, in writing from the department, information on Forest Practices Applications and Notification filed on specified areas.

Alluvial Fan: A depositional landform consisting of cone-shaped deposits of water-borne, often coarse-sized sediments.

Alternate Plan: Alternate plans are intended to provide landowners with a means to develop site-specific management plans for timber activities regulated under state Forest Practices Rules chapters 222-22 through 222-38 WAC.. An Alternate Plan may alter the prescriptions outlined in the Rules as long as the plan provides protection to public resources at least equal in overall effectiveness to the protections offered by the Forest Practices Act and the Forest Practices Rules.

Anadromous Fish: Fish whose life cycle includes time spent in both fresh and salt water.

Archaeology: A systematic, scientific study of human's past through material remains. (RCW 27.53.030 DAHP)

Archaeological object: An object that comprises the physical evidence of an indigenous and subsequent culture including material remains of past human life, monuments, symbols, tools, facilities, and technological by-products. (RCW 27.53.030 DAHP)

Archaeological Site: A geographic locality in Washington, including but not limited to, submerged and submersible lands and the bed of the sea within the state's jurisdiction, that contains archaeological objects (RCW 27.53.030 DAHP).

Armoring: Placing rocks on headwall or fill material around a culvert to prevent water from eroding and undercutting the culvert and flowing under the road.

Ballast: Coarse base rock placed on top of subgrade to stabilize the road bed.

Bankfull Width: The channel width at the estimated water surface elevation required to completely fill the channel.

For streams, the measurement of the lateral extent of the water surface elevation perpendicular to the channel at bankfull depth. For multiple channels, bankfull width is the sum of the individual channel widths along the cross-section.

For lakes, ponds, and impoundments, the line of mean high water.

For tidal water, the line of mean high tide.

For periodically inundated areas associated with wetlands, the line of common and usual periodic inundation determined by examining the edge of the inundated area.

Bare Root: A type of tree seedling grown by a forest nursery in seed or transplant beds (i.e., outdoors and directly in the soil, not in containers in a greenhouse) and when lifted from the nursery bed has its roots free of soil. Bare root seedlings are designated by abbreviated common species name (i.e., DF for Douglas-fir, WRC for western redcedar, PP for ponderosa pine, etc.), years in a seedbed, and years in a transplant bed (e.g., 2+0, 1+1). If germinated as a plug in a greenhouse before transplanted, the letter P supplants the years in a seedbed (e.g., P+1). For example, a plug transplant seedling type might be "RA P+1," pronounced "red alder plug one."

Basal Area: The area in square feet of the cross-section of a tree bole measured at 4.5 feet above the ground.

Best Management Practices (BMPs): Proactive and often voluntary forest stewardship practices that have been determined to be the most effective, practical means of preventing or reducing soil and other pollutants from entering any water; streams, ponds, lakes, etc.

Board of Natural Resources (BNR): As defined and authorized in RCW 43.30.205, the BNR consists of six members: the governor or governor designee, the superintendent of public instruction, the commissioner of public lands, the dean of the college of forestry of the University of Washington, the dean of the college of human and natural resources sciences of Washington State University, and a representative of those counties containing state forest lands acquired by the department. The BNR's duties include establishing department policy and setting appraisal value of lands and valuable materials including timber values offered for sale. See RCW 43.30.205 for more duties of BNR.

Board Foot: The amount of wood contained in an unfinished board 1 inch thick, 12 inches long, and 12 inches wide (2.54 x 30.5 x 30.5 cm), abbreviated bd ft –note in trees or logs, board-foot volume is a measure of merchantability, and therefore the number of board feet in a cubic foot depends on tree diameter, amount of slab, and saw kerf; commonly, 1,000 bd ft is written as 1 MBF and 1,000,000 bd ft as 1 MMBF (SAF).

Bog: Wetlands which have the following characteristics: Hydric organic soils (peat and/or muck) typically 16 inches or more in depth (except over bedrock or hardpan); and vegetation such as sphagnum moss, Labrador tea, bog laurel, bog rosemary, sundews and sedges. Bogs may have an overstory of spruce, western hemlock, lodgepole pine, western red cedar, western white pine, Oregon crabapple, or quaking aspen, and may be associated with open water. This includes nutrient-poor fens. (See Board Manual Section 8.)

Bole: A trunk or a main stem of a tree.

Bull Trout Habitat Overlay: Those portions of Eastern Washington streams containing bull trout habitat as identified on the Washington Department of Fish and Wildlife's bull trout map.

Bucking: Cutting logs into specified lengths.

Cable: A rope made of single-strand metal wires.

Cable Yarding System: A category of logging systems that uses cables to pull logs to a landing. Cable yarding systems use a yarder with a tower (generally 30 to 110 feet in height) or other spar at the landing. The two main types of cable yarding systems are highlead and skyline.

Catch Basin: A constructed basin at and immediately upstream of culvert openings, designed to slow water velocity and trap sediment before water flows through the culvert.

Channel Migration Zone (CMZ): The area where the active channel of a stream is prone to move.

Clearcut: A harvest method in which the entire stand of trees is removed in a timber harvesting operation. Except as provided in WAC 222-30-110, an area remains clearcut until:

- ▶ It meets the minimum stocking requirements under WAC 222-34-010(2) or 222-34-020(2); and
- ▶ The largest trees qualifying for the minimum stocking levels have survived on the area for five

growing seasons or, if not, they have reached an average height of four feet.

Confluence: The point at which two or more streams merge into one stream channel.

Conifer: A cone-bearing tree with needles, such as pine, spruce, fir and larch.

Contiguous: Land adjoining or touching by common corner or otherwise. Land having common ownership divided by a road or other right of way shall be considered contiguous.

Critical Habitat (federal): The habitat of any threatened or endangered species designated as critical habitat by the United States Secretary of the Interior or Commerce under Sections 3 (5)(A) and 4 (a)(3) of the Federal Endangered Species Act.

Critical Habitat (state): Those habitats designated by the Forest Practices Board in accordance with WAC 222-16-080.

Relief Culverts: Installed structures, such as culverts, water bars, and rolling dips that move water across or under the road surface to the forest floor.

Crowned Roads: Roads constructed with the highest point in the middle to drain water off half the road to the outside, and half the road to an inside ditch.

Cultural Resource: Archaeological and historic sites and artifacts, and traditional religious, ceremonial and social uses and activities of affected Indian Tribes.

Culturally Modified Tree: A tree that has been altered by native people as part of their traditional use of forests.

Debris: Woody vegetative residue less than 3 cubic feet in size resulting from forest practices activities.

Deciduous: A tree that loses its leaves or needles during the fall and winter. Such as maple, alder and oak trees.

Desired Future Condition (DFC): The stand conditions of a mature riparian forest at 140 years of age.

Diameter at Breast Height (DBH): A tree's diameter measured 4.5 feet above the ground measured from the uphill side.

Ditch-out: Extending the ditch away from the roadway to divert water to the forest floor.

Down Logs: Larger diameter woody debris left on site after harvest to provide wildlife habitat.

Drainage Structure: A construction technique or feature that is built to relieve surface runoff and/or intercepted ground water from roadside ditches to prevent excessive buildup in water volume and velocity. A drainage structure is not intended to carry any typed water. Drainage structures include structures such as: cross drains, relief culverts, ditch diversions, water bars, or other such structures demonstrated to be equally effective.

End Hauling: The removal and transportation of excavated material, pit or quarry overburden, or landing or road cut material from the excavation site to a deposit site not adjacent to the point of removal.

Energy Dissipater: Material, such as rocks or wood, placed at the outlet of a culvert to slow and disperse the flow of water.

Equipment Limitation Zone (ELZ): A 30-foot wide zone measured horizontally from the outer edge of the bankfull width of a Type Np or Ns stream. It applies to all perennial and seasonal non-fish habitat streams.

Even-aged Harvest: Refers to the following harvest methods:

- ▶ Clearcuts
- ▶ Seed tree harvests in which twenty or fewer trees per acre remain after harvest
- ▶ Shelterwood regeneration harvests in which twenty or fewer trees per acre remain after harvest
- ▶ Group or strip shelterwood harvests creating openings wider than two tree heights, based on dominant trees
- ▶ Shelterwood removal harvests which leave fewer than 150 trees per acre which are at least five years old or four feet in average height

▶ Partial cutting in which fewer than 50 trees per acre remain after harvest

▶ Overstory removal when more than 5,000 board feet per acre is removed and fewer than 50 trees per acre at least ten feet in height remain after harvest

▶ Other harvesting methods designed to manage for multiple age classes in which six or fewer trees per acre remain after harvest

Except as provided above for shelterwood removal harvests and overstory removal, trees counted as remaining after harvest shall be at least ten inches in diameter at breast height and have at least the top one-third of the stem supporting green, live crowns. Except as provided in WAC 222-30-110, an area remains harvested by even-aged methods until it meets the minimum stocking requirements under WAC 222-34-010 (2) or 222-34-020(2) and the largest trees qualifying for the minimum stocking levels have survived on the area for five growing seasons or, if not, they have reached an average height of four feet.

Fertilizers: Any substance or any combination or mixture of substances used principally as a source of plant food or soil amendment.

Fill: The placement of earth material or aggregate for road or landing construction or other similar activities.

Fish: For purposes of the Forest Practices Rules, species of the vertebrate taxonomic groups of Cephalospidomorphi and Osteichthyes.

Fish Habitat: Habitat which is used by fish at any life stage at any time of the year, including potential habitat likely to be used by fish, which could be recovered by restoration or management and includes off-channel habitat.

Fish Passage Barrier: Any artificial instream structure that impedes the free passage of fish.

Ford: A constructed or natural stream crossing that can be driven through when the water level is low.

Forest Practices Hydraulic Project: A forest practices activity that includes the construction or performance of work that will use, divert, obstruct, or change the natural flow or bed of any Type S, F, or N Water.

Forest Chemicals: Pesticides, fertilizers, animal repellents and other chemicals applied to forest lands and road surfaces.

Forest Land: All land which is capable of supporting a merchantable stand of timber and is not being actively used for a use which is incompatible with timber growing.

Forest Landowner: Any person in actual control of forest land, whether such control is based either on legal or equitable title, or on any other interest entitling the holder to sell or otherwise dispose of any or all of the timber on such land in any manner: Provided, That any lessee or other person in possession of forest land without legal or equitable title to such land shall be excluded from the definition of "forest landowner" unless such lessee or other person has the right to sell or otherwise dispose of any or all of the timber located on such forest land.

Forest Practice: Activities conducted on forest lands related to growing, harvesting or processing timber that are regulated by the Forest Practices Act. These include road construction and maintenance, thinning and salvage of trees, harvesting, reforestation, brush control, and using fertilizers or pesticides.

Forest Practices Board: The Board is an independent state agency chaired by the Commissioner of Public Lands who administers the Department of Natural Resources (DNR). DNR provides staff support to the Board and implements and enforces the Forest Practices Rules. The Forest Practices Board adopts rules that set minimum standards for forest practices such as timber harvest, pre-commercial thinning, road construction, fertilization, and forest chemical application.

By law, the 12-member board is constituted as follows:

- ▶ Commissioner of Public Lands, board chair (or designee)
- ▶ Director, Department of Community, Trade and Economic Development (or designee)
- ▶ Director, Department of Ecology (or designee)
- ▶ Director, Department of Agriculture (or designee)
- ▶ Director, Department of Fish and Wildlife (or designee)
- ▶ An elected member of a county commission or council, and appointed by the governor.
- ▶ Six members of the general public, each of whom serves a four-year term after being appointed by the governor. The law requires that one of those

members own less than 500 acres of forest land; another member must be an independent logging contractor.

Forest Practices Appeals Board: The Forest Practices Appeals Board (FPAB) created by RCW 76.09.210. The FPAB hears appeals from the decisions of the Department of Natural Resources (DNR) including the approval or disapproval of a Forest Practices Application, civil penalties, stop work orders and notices to comply. The FPAB's sole function is to provide all litigants a full and complete administrative hearing, as promptly as possible, followed by a fair and impartial written decision based on the facts and law. The FPAB is an independent, quasi-judicial hearings board entirely separate from DNR and any other state, regional or local unit of government. The Board consists of three members, who are appointed by the Governor and confirmed by the State Senate for staggered six-year terms. One of the three must be an attorney. The presiding officer at each hearing is an Administrative Appeals Judge on staff within the Environmental Hearings Office.

Forwarding: Using a fully-mechanized harvesting system to pick up logs and haul them from the woods to a landing.

Full Bench Construction: A road constructed on a side hill without using any of the material removed from the hillside as a part of the road. This construction technique is usually used on steep or unstable slopes.

Green Recruitment Trees (GRTs): Those trees left after harvest for the purpose of becoming future wildlife reserve trees under WAC 222-30-020(12 (b)).

Ground Application: Applying chemicals using motorized power equipment.

Hand Application: Using non-motorized equipment to apply chemicals to specific targets, such as vegetation, trees, stumps, and burrows, or as bait or in traps.

Headwall: Wall constructed of impervious and erosion-resistant material (rocks) at culvert openings to direct water into the culvert and to protect the road fill material from eroding.

Headwall Seep: A seep of water located at the toe of the edge of a cliff and at the head of a type Np stream, which connects to the stream by overland flow, and is recognized by loose substrate and/or fractured bedrock with perennial water at or near the surface throughout the year.

Headwater Spring: A permanent spring at the head of a perennial channel.

Herbicide: Any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any tree, bush, weed or algae and other aquatic weeds.

Highlead: A two-drum cable yarding system in which the yarder is associated with a landing-based tower or spar and that results in reducing the impact to the soil.

Historic: Peoples and cultures who are known through written documents in their own or other languages. As applied to underwater archaeological resources, the term historic shall include only those properties which are listed in or eligible for listing in the Washington State Register of Historic Places (RCW 27.34.220) or the National Register of Historic Places as defined in the National Historic Preservation Act of 1966 (Title 1, Sec. 101, Public Law 89-665; 80 Stat. 915; 16 U.S.C. Sec. 470) as now or hereafter amended (RCW 27.53.030 DAHP).

Historic Archaeological Resources: Properties which are listed in or eligible for listing in the Washington State Register of Historic Places (RCW 27.34.220) or the National Register of Historic Places as defined in the National Historic Preservation Act of 1966 (Title 1, Sec. 101, Public Law 89-665; 80 Stat. 915; 16 U.S.C. Sec. 470) as now or hereafter amended (RCW 27.53.030 DAHP).

Historic Site: Sites, areas and structures or other evidence of human activities illustrative of the origins, evolution and development of the nation, state or locality; or places associated with a personality important in history; or places where significant historical events are known to have occurred even though no physical evidence of the event remains.

Horizontal Distance: The distance between two points measured at a 0% slope.

Inactive Road: A forest road on which commercial hauling is discontinued for one or more harvest seasons, and is maintained for occasional forest management activities.

Interdisciplinary Team (ID Team): A group of varying size comprised of individuals having specialized expertise, assembled by the DNR to respond to technical questions associated with a proposed forest practices activity.

Insecticide: Any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any insect, other arthropods or mollusk pests.

Insloped Roads: Roads constructed to slope toward the inside edge so water drains into a ditch and is drained to stable locations with relief culverts.

J-root: A defect in tree planting in which a seedling's root system is distorted into a J-shape when planted.

Landing: A central location where logs are transported for sorting and loading onto trucks.

Large Woody Debris (LWD): Large pieces of wood in stream channels or on the ground – includes logs, pieces of logs, and large chunks of wood; provides streambed stability and/or habitat complexity. Also called coarse woody debris (CWD) or large down woody debris (LDWD).

Leave Trees: Trees intentionally left standing after a harvest or thinning.

Log: A merchantable length of timber cut from a harvested tree.

Natural Reseeding: Letting on-site or nearby trees reseed the harvest area.

Operator: Any person engaging in forest practices, but does not include employees of the operator with wages as his/her sole compensation.

Outsloped Roads: Roads constructed to slope toward the outside so water drains slowly over the outer edge.

Partial Cut: The removal of a portion of the merchantable volume in a stand of timber so as to leave an uneven-aged stand of fewer than 50 tree per acre of well-distributed residual, healthy trees that will reasonably utilize the productivity of the soil. Partial cutting does not include seedtree or shelterwood or other types of regeneration cutting.

Perennial Stream: A stream that does not go dry any time of a year of normal rainfall. For the purpose of water typing, Type Np waters include the intermittent dry portions of the perennial channel below the uppermost point of the perennial flow.

Perched Landings: Logging debris piled on edge of landings over steep slopes that has the potential to fall and enter water.

Pesticides: Any insecticide, herbicide, fungicide, or rodenticide, not including nontoxic repellents or other forest chemicals (fertilizers).

Plantable Area: An area capable of supporting a commercial stand of timber, excluding lands devoted to permanent roads, utility rights-of-way, that portion of Riparian Management Zones where scarification is not permitted, and any other area devoted to a use incompatible with commercial timber growing.

Planting: Hand-planting seedlings in a harvested area.

Prehistoric: Peoples and cultures who are unknown through contemporaneous written documents in any language (RCW 27.53.030 DAHP).

Public Resources: The Forest Practices Act defines public resources as: water, fish, wildlife, and capital improvements of the state or its political subdivisions (i.e., counties and cities).

Reforestation: Re-establishing a forest in an area where trees have been removed.

Relief Culvert: A type of relief culvert used to divert water from the ditch to the forest floor on the other side of the road. A relief culvert is not used for a stream crossing.

Riparian Area: The area of land adjacent to streams, rivers, lakes and ponds, which provide important fish and wildlife habitat and water quality.

Riparian Management Zone (RMZ):

(1) For Western Washington

(a) The area protected on each side of a Type S or F stream measured horizontally from the outer edge of the bankfull width or the outer edge of the CMZ, whichever is greater (see table below); and

Site Class	Western Washington Total RMZ Width
I	200'
II	170'
III	140'
IV	110'
V	90'

(b) The area protected on each side of Type Np Waters, measured horizontally from the outer edge of the bankfull width. (See WAC 222-30-021(2).)

(2) For Eastern Washington

(a) The area protected on each side of a Type S or F stream measured horizontally from the outer edge of the bankfull width or the outer edge of the CMZ, whichever is greater (see table below); and

Site Class	Eastern Washington Total RMZ Width
I	130'
II	110'
III	90' or 100'*
IV	75' or 100'*
V	75' or 100'*

*Dependent upon stream size. (See WAC 222-30-022.)

(b) The area protected on each side of Type Np Waters, measured horizontally from the outer edge of the bankfull width. (See WAC 222-30-022 (2).)

Rock Weir: A small rock dam used in a ditch to slow water velocity and to filter sediment.

Rolling Dip: A constructed break in the road grade to allow water to run off; a drivable water bar.

Salvage: Harvesting damaged or defective trees for their economic value or for forest health. Includes salvage of residual cedar, blow-down stands, and fire-damaged stands.

Scarify: To disturb the forest floor and topsoil in preparation for natural regeneration, direct seeding or planting.

Seasonal Stream: A stream where surface flow is not present for at least some portion of a year of normal rainfall.

Sediment: Solid fragments of inorganic or organic material that come from the weathering of rock and are carried and deposited by wind, water, or ice.

Sediment Trap: A constructed basin installed adjacent to stream crossing and/or relief culverts to slow water velocity and settle soil particles.

Sensitive Sites: Areas that are near or next to Np stream and have one or more of the following: headwall seep, side-slope seep, Type Np intersection, headwater spring, or an alluvial fan.

Shorelines of the State: All the waters of the state where the average annual flow is 20 cubic feet per second or greater.

Side Cast(ing): Moving excavated material to the side and depositing such material within the limits of construction or dumping over the side and outside the limits of construction.

Side Slope Seep: A seep within 100 feet of a Type Np stream located on side-slopes which are greater than 20 percent, connected to the stream channel network via overland flow, and characterized by loose substrate and fractured bedrock, excluding muck with perennial water at or near the surface throughout the year. Water delivery to the Type Np channel is visible by someone standing in or near the stream.

Silviculture: The art, science and practice of planting, caring for, harvesting, and regrowing forest stands with desired qualities, based on knowledge of species and their requirements.

Site Class: A grouping of site indices that are used to determine the 50-year or 100-year site class. In order to determine site class, the landowner will obtain the site class index from the state soil survey, place it in the correct index range shown in the two tables provided in this definition, and select the corresponding site class. The site class will then drive the RMZ width. (See WAC 222-30-021 and 222-30-022.)

Site Index: Height of a tree at a specified index or base age. Used as an indicator of site quality.

Site Preparation: Those activities associated with the removal of slash in preparing a site for planting, including scarification and/or slash burning.

Skid Trail: A route used by tracked or wheeled skidders to move logs to a landing or road.

Skidding: Pulling logs with ground equipment or horses from the stump to the landing.

Skyline System: A cable yarding system in which the yarder is associated with a landing-based tower or spar and that is capable of suspending at least one, and often both, ends of logs.

Slash: Pieces of woody material containing more than 3 cubic feet, resulting from forest practices activities.

Snag: A standing dead tree, may have some live limbs toward the top of the tree. Also known as WRT (Wildlife Reserve Tree).

Spar: A standing or raised tree or steel tower used to provide lift for rigging in cable logging systems (SAF).

Spoil: Excess material removed as overburden or generated during road or landing construction which is not used within limits of construction.

Stable Area: A location in the forest that does not have potential to cause a landslide or create resource damage.

State Environmental Policy Act (SEPA): A state policy that requires state and local agencies to consider the likely environmental consequences of a proposal before approving or denying the proposal.

Stream-adjacent parallel roads: Roads (including associated right of way clearing) in a Riparian Management Zone on a property that have an alignment that is parallel to the general alignment of the stream, including roads used by others under easements or cooperative road agreements. Also included are stream crossings where the alignment of the road continues to parallel the stream for more than 250 feet on either side of the stream. Not included are federal, state, county or municipal roads that are not subject to Forest Practices Rules, or roads of another adjacent landowner.

Subgrade: Road surface shaped and graded before application of rock.

Temporary (Seasonal) Roads: A forest road that is constructed and intended for use during the life of an approved Forest Practices Application/Notification. All temporary roads must be abandoned in accordance to WAC 222-24-052(3).

Threatened or Endangered Species: All species of wildlife listed as "threatened" or "endangered" by the United States Secretary of the Interior or Commerce, and all species of wildlife designated as "threatened" or "endangered" by the Washington Fish and Wildlife Commission.

Timber Owner: Any person having all or any part of the legal interest in timber. Where such timber is subject to a contract of sale, "timber owner" shall mean the contract purchaser.

Turn-outs: A widening of the road to allow oncoming traffic to pass safely.

Type Np Intersection: The intersection of two or more Type Np Waters.

Uneven-aged Harvest: Periodically removing merchantable trees of different ages and sizes, including thinning and salvage, to maintain a stand with a mix of age classes.

Waste Area: A stable location for placing end-haul materials.

Water Bars: Constructed drainage devices in the road surface that divert water to the forest floor.

Stream crossing Structures: Bridges, culverts, arches, fords, and temporary crossings installed in streams to maintain natural water flow.

Wetland Management Zone (WMZ): Area adjacent to Type A or B wetland where specific measures are taken to protect the water quality and quantity, and fish and wildlife habitat.

Wetlands: Areas that are saturated or covered with water long enough and often enough that their soils and plants differ from those in nearby uplands.

Type A Wetlands: At least 1/2 acre of open water for one week during the growing season, with surrounding crown closure less than 30 percent (see Board Manual in Forest Practices Rule book for specifics).

Type B Wetlands: All other non-forested wetlands greater than 1/4 acre.

Forested Wetlands: Wetlands with tree canopy closure of at least 30 percent.

Bog: Wetland or forested wetland consisting of saturated organic material, such as peat and muck, and plants that tolerate acidic soils, such as sedges and bog laurel.

Wildlife Reserve Trees (WRTs): Dead, dying, defective or damaged trees left standing after harvest to provide wildlife habitat. Wildlife reserve trees are categorized as follows:

Type 1 wildlife reserve trees are defective or deformed live trees that have observably sound tops, limbs, trunks, and roots. They may have part of the top broken out or have evidence of other severe defects that include: "Cat face," animal chewing, old logging wounds, weather injury, insect attack, or lightning

strike. Unless approved by the landowner, only green trees with visible cavities, nests, or obvious severe defects capable of supporting cavity dependent species shall be considered as Type 1 wildlife reserve trees. These trees must be stable and pose the least hazard for workers.

Type 2 wildlife reserve trees are dead Type 1 trees with sound tops, limbs, trunks, and roots.

Type 3 wildlife reserve trees are live or dead trees with unstable tops or upper portions. Unless approved by the landowner, only green trees with visible cavities, nests, or obvious severe defects capable of supporting cavity dependent species shall be considered as Type 3 wildlife reserve trees. Although the roots and main portion of the trunk are sound, these reserve trees pose high hazard because of the defect in live or dead wood higher up in the tree.

Type 4 wildlife reserve trees are live or dead trees with unstable trunks or roots, with or without bark. This includes "soft snags" as well as live trees with unstable roots caused by root rot or fire. These trees are unstable and pose a high hazard to workers.

Windthrow: A natural process by which trees are uprooted or sustain severe trunk damage caused by winds.

Yarding Corridor: A narrow, linear path through a riparian management zone to allow suspended cables necessary to support cable logging methods or suspended or partially suspended logs to be transported through these areas by cable logging methods.

Yarding: Moving logs by a cable system from the stump to a landing.

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