

OREGON'S FOREST PROTECTION LAWS

AN ILLUSTRATED MANUAL
REVISED – THIRD EDITION



Oregon Forest
Resources Institute

About this book

Who is it for?

- Landowners and operators who manage and work on Oregon forestland
- Foresters who develop management plans for forestland owners
- Anyone interested in learning about the Oregon Forest Practices Act and other protection laws

What is it about?

Protecting forests and meeting the Forest Practices Act requirements when:

- Harvesting trees, especially around streams, lakes or wetlands
- Providing for the needs of wildlife
- Disposing of forest slash
- Building or improving forest roads
- Applying chemicals to forestland
- Protection from fire and use of fire

How it should be used

Use it to plan your forest management objectives while protecting natural resources.

Use it as a quick reference before starting any operation.

Use it to communicate among landowners, operators and Department of Forestry foresters.

Keep it in your vehicle so it's there when you need it.

What it won't do

It won't send in your E-Notification to the Department of Forestry 15 days before starting a forestry operation.

It won't substitute for your responsibility to know the laws and regulations of other agencies that govern forestland operations.

It won't exempt you from knowing the details of the Act.

Will the Forest Practices Act and Rules change?

Yes, because the Forest Practices Act and Rules continue to evolve. They respond to new needs and advances in forest research and experience.



This symbol indicates specific requirements very close to the actual wording in the Act and Rules. Because of potential changes, always verify current requirements and wording.

Since it was first published in 2002, *Forest Protection Laws: An Illustrated Manual* has become a standard reference for those planning and executing timber harvests. It is a visual resource, often found dog-eared and grimy in the vehicles used by those whose work is hands-on forestry. And for good reason, because the publication fosters easy understanding and correct application of the Oregon Forest Practices Act and Rules and the other best management practices, laws and rules that apply to Oregon's forest landowners.

However, this manual is not intended to replace the official version of the rules, which are available from the Oregon Department of Forestry, nor is it intended to replace the advice and resources of an ODF Stewardship Forester. For in the end, it is the two-way communication between the ODF forester and those using this manual that helps the state achieve its goals for best management practices.

This Revised Third Edition was necessary to take into account changes in the Water Protection Rules with the addition of SSBT stream types, changes in the Industrial Fire Precaution Levels, changes in rules to protect sensitive wildlife species with the federal delisting of the bald eagle, and other minor changes.

The Oregon Forest Resources Institute acknowledges and thanks Dr. Paul Adams, formerly with the OSU Forestry and Natural Resources Extension Program, and Rex Storm of the Associated Oregon Loggers for leading the revisions in the second edition of this manual in 2011.

The high quality of the second and third editions would not have been possible without a high-quality first edition. OFRI also thanks and recognizes Robert Logan for his vision in producing the original 2002 edition of *Oregon's Forest Protection Laws: An Illustrated Manual*.

The previous editions have been extremely useful to loggers, private foresters, woodland owners and forestry educators in their efforts to promote the best management practices that keep our forests sustainable. There have been significant changes in the rules since 2011, when the second edition was published, that have been incorporated into this third edition.

One thing that has not changed is the dedication of Oregon's forest landowners, managers and operators to sustainable forest management. We hope this updated edition will be as much of an educational resource to help you manage and protect our valuable forest resources as the first two editions.

Mike Cloughesy
Director of Forestry
Oregon Forest Resources Institute

Contents

1 Introduction

Why does Oregon have a forest practices act?	1
What is an operation or a forest practice?	4
How to comply with the Oregon Forest Practices Act and Rules	6
How waters of the state are classified and protected	8

2 Planning a timber harvest

You want to harvest timber on your property. How do you plan for it?	13
Follow these steps to know what your timber harvest requirements will be	14
You want to harvest timber along a stream. What do you need to know?	19
You want to harvest timber near a lake. How do you meet the requirements?	34
You want to harvest timber in or near a wetland. How do you meet the requirements?	36
What are the requirements for leaving wildlife trees, snags and down logs?	38
How do you protect sensitive wildlife sites when you harvest?	41
What about the northern spotted owl?	43
What about the bald eagle?	44
What about the osprey?	46
What about the great-blue heron?	48
What are the requirements for harvesting near scenic highways?	49
What are the requirements where rapidly moving landslides may occur?	51

3 Doing a timber harvest

What should you know when felling, bucking and limbing trees near water?	55
What should you know when ground yarding near water and using temporary crossings?	57
What should you know when ground yarding outside RMAs?	63
What should you know when cable logging near water?	67
What are the requirements for log landings?	68
What should you know about slash treatment and site preparation?	71

4 Reforestation after harvest

You will be harvesting some timber. Do you need to plan to reforest the area?	75
---	----

5 Fire and chemicals

Fire prevention during forest operations	85
How do fire precaution levels affect forest operations?	88
Summary of key requirements during the fire season	89
Using fire: Prescribed burning for forest management objectives	91
Fire protection for homes on forestlands	96
Using engine fuels, oils and other petroleum products	99
Using chemicals to control vegetation and pests	102

6 Roads and stream crossings

The roads on your property need some maintenance. What do you need to know?	107
You want to build or reconstruct a forest road. What do you need to know?	120
You want to build or improve a stream crossing. What do you need to know?	123

7 Other considerations

Additional requirements may affect some forest operations	135
Opportunities to enhance resources through voluntary measures	137

8 Appendix

What you should know about a written plan	143
How to determine the site class for your harvest unit	145
Common types of timber harvest systems	148
Conventional chainsaw and tractor/skidder harvest	149
Cable logging	150
Shovel logging	151
Cut-to-length harvesting	152
Whole-tree harvesting	153
Helicopter logging	154
Cultural resources	155
How to know the basal area of your harvest, reforestation or riparian management area	156
General prescription requirements for stream RMAs	160
How to plan for and calculate peak flows for stream crossings	192
Glossary	194
Other information sources	197
Index	199

INTRODUCTION

Why does Oregon have a forest practices act?

Because forests matter.

Forests provide environmental, social and economic benefits that reach beyond their boundaries. They provide clean water, fish and wildlife habitat, and recreation. They provide jobs, products and tax revenues that result in healthy communities. The Oregon Forest Practices Act helps sustain these values in a socially accountable manner.

Because Oregonians value their forests.

Our forests are key to our quality of life as Oregonians. Forest landowners, operators and foresters are stewards of Oregon's forests. Good stewards accept responsibility for sustaining our forests and for protecting soil, air, fish, wildlife, water quality and other resources valued by the public. The Oregon Forest Practices Act and Rules makes clear the stewardship expectations of the public and ensures that landowners operating under its rules can manage their forests for a variety of objectives.

Because Oregon is a national leader.

The Legislature passed the Act in 1971, creating the first Forest Practices Act in the nation. It was prompted by emerging concerns about multiple forest resources, including findings from pioneering research on forest watersheds. The Act provides a statutory framework for a comprehensive program that includes detailed rules, technical assistance and monitoring.

To set standards for all forest landowners.

The Oregon Forest Practices Act and Rules set standards for any commercial activity involving the establishment, management or harvesting of trees on Oregon's forestlands. They regulate these forest operations on all non-federal lands (private, state-owned and county- or city-owned). Operations on lands managed by the USDA Forest Service and USDI Bureau of Land Management are not directly regulated, but both agencies agree to meet or exceed the Oregon Forest Practices Act and Rules requirements.

Who makes the rule requirements?

Oregon law gives the Oregon Board of Forestry primary responsibility to adopt or revise rules for forest practices. The board uses information and input from regional committees and other diverse advisory groups, including recommendations about potential rules changes. This approach helps keep the requirements current and responsive to evolving knowledge and concerns. Occasionally, the Legislature has amended the Forest Practices Act to include some specific requirements for forest operations, such as those for timber harvests near scenic highways.

Who administers the requirements?

Stewardship Foresters employed by the Oregon Department of Forestry (ODF), work with landowners and operators to help them achieve their objectives while complying with the requirements and avoid problems. This involves a balance of education, technical design, and enforcement. Stewardship Foresters are responsible for reviewing pre-operation plans, inspecting operations, determining reforestation compliance, investigating complaints and where necessary, taking enforcement actions. Sometimes enforcement action may lead to civil or criminal penalties.

How do you stay on top of the Forest Practices Act and Rules?

First, spend time planning. For example, if it's a timber harvest you want to do, ask yourself these questions. Consult with those who can help with answers.

- Do you know the site features, including the slopes, drainage and other natural characteristics?
- What could be the effect of the harvest and road construction on water quality?
- Are there soils with potential for compaction and erosion?
- Are there riparian and wetland areas that require special attention?
- What accommodations need to be made to protect wildlife habitat?
- When reforestation is needed after harvest, what is the plan for that?
- What slash treatment and site preparation will be necessary to establish a new forest?

If trying to answer these questions raises more questions for you, this manual is a place to start. Check it out. It will help.





What is an operation or a forest practice?

An operation or forest practice is any commercial activity relating to the establishment, management or harvest of forest tree species. Most forest practices fall into one of the following general categories: road construction and maintenance, site preparation by treating slash, reforestation, harvesting or use of pesticides or fertilizers. Before conducting an operation or forest practice, landowners and operators will usually need to inform the state by submitting an E-Notification of Operation (see page 6) to ODF. The definition of an operation specifically excludes some activities, to help clarify what is and is not regulated by the Act and Rules. See below.

What operations require a notification?

- road construction
- slash disposal (burning, chipping, biomass processing, etc.)
- precommercial thinning
- harvesting
- applying chemicals and using petroleum products
- quarry site development for rock used in forest operations
- site preparation for reforestation
- converting forestland to non-forest use

What operations do not require a notification?

- tree planting
- routine road maintenance
- personal-use firewood cutting
- collecting tree boughs, cones or similar minor forest products

What activities are specifically not operations?

In some cases a permit to operate power-driven machinery may be required for operations that do not require a notification or for activities listed below that are specifically not included as operations under the Act. Operations that do not require a notification must still be conducted in compliance with any applicable forest practice requirements:

- the establishment, management or harvest of Christmas trees on land used solely for their production
- hardwood plantations harvested on a rotation cycle that is 12 or fewer years after planting and subject to intensive agricultural practices
- agricultural tree crops, including nuts, fruits, seeds and nursery stock
- ornamental, street or park trees within an urbanized area
- juniper species management in a unit of less than 120 contiguous acres within a single ownership
- trees intended to mitigate agricultural practices that are established or managed for windbreaks, riparian filters or shade strips immediately adjacent to actively farmed lands

What other requirements are described in this manual?

- when to provide wildlife trees and down logs while harvesting
- limitations on the size of clearcut harvests
- how to protect bird nesting, roosting and watering sites
- ensuring fish passage through stream crossing structures
- how to operate where rapidly moving landslides might occur
- how to harvest and reforest next to scenic highways
- log landing requirements
- the proper disposal of logging waste
- chemical applications



How to comply with the Oregon Forest Practices Act and Rules



File a Notification of Operation as required.

After you've planned the operation, submit a Notification of Operation via the E-Notification website **at least 15 days prior to the start of the operation**. Failure to file is a violation under the Forest Practices Act and Rules.



For more information, see E-Notification at www.oregon.gov/odf



How do notifications work?

- The landowner, operator or a party representing them submits a Notification of Operation using the E-Notification website, commonly known as FERNs. The website form will require you to tell ODF what activities you are planning, where they will take place and who will be operating them.

Note: If you're cutting and selling timber from farmland or rural residential land, a Notification of Operation is also required.

- ODF must have your Notification of Operation at least 15 days before you expect to start the operation, so schedule activities accordingly.
- Will your operation use power-driven machinery or fire for slash disposal or site preparation? The notification form is used to apply for a permit to use machinery or burning. Follow fire prevention requirements on page 81.
- When a notification is submitted, FERNs will send you an e-mail with your notification number for your operation. This number is important for harvest tax purposes.
- *A notification is not a permit. It is only information to ODF of your intent. The 15-day waiting period and written plan review simply provide for planning to comply with protection rules.*
- Throughout the operation, the landowner or operator is required to follow all forest practice requirements that apply.

- Anyone can subscribe to receive copies of notifications and submit official comments about written plans for forestry work.

What activities require a written plan?

Operators need to submit a written plan to ODF, along with the notification, before starting some activities. Written plans allow ODF foresters to work with operators to help them meet Forest Practices Act requirements. Written plans are referred to in other parts of this manual, including the Appendix, page 143.

There are three kinds of written plans:

STATUTORY WRITTEN PLANS

ODF foresters may be able to waive the requirement of some statutory written plans, but if they're required, the waiting period may not be waived. ODF foresters review these plans and may comment, but they do not provide a formal approval. Consult your Stewardship Forester or see page 143. The following activities require statutory plans:

- operations within 100 feet of a Type F, SSBT or D stream (even when dry) (see page 8)
- operations within 100 feet of a large lake or within 300 feet of a significant wetland (see pages 36-37)

- operations within 300 feet of areas identified by ODF as important for certain wildlife species

NONSTATUTORY WRITTEN PLANS

These plans are like statutory written plans, except that ODF foresters can waive the requirement or reduce the waiting period. ODF foresters review these plans but do not provide a formal approval or disapproval. A full list of activities requiring this kind of written plan is shown in the Appendix, page 143. Some examples are:

- building road fills deeper than 15 feet
- operations within 100 feet of a large lake

PLAN FOR AN ALTERNATE PRACTICE

Operators can use this type of plan to propose methods that are different than what is spelled out in the rules. If the plan will result in equal or better resource protection, ODF foresters will approve the plan. This kind of plan is meant to encourage good ideas for effective actions, and is the only kind of plan ODF foresters approve or deny approval for. One example of this kind of plan would be for using natural reforestation methods instead of tree planting after harvest. See page 137.

For other information sources, see the Appendix, pages 197-198.

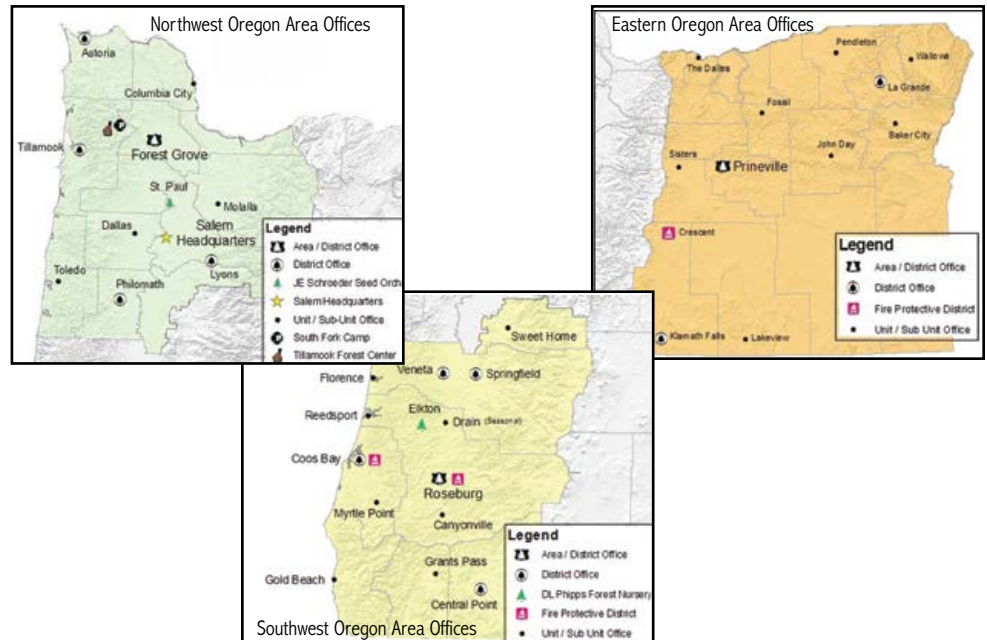
Oregon is divided into three administrative areas. Each area has Forest Protection Districts. Know your local ODF district.

How do I find a local ODF office?

For more information about Oregon's Forest Practices Act or rules, please contact your local ODF district office, or the headquarters office at 2600 State St. Salem, OR 97310; 503-945-7200; Fax 503-945-7212; TTY 800-437-4490

E-mail: forestryinformation@oregon.gov

Web: www.oregon.gov/ODF



This manual goes a long way toward explaining the requirements, but it may not be enough. The application of forest practices on specific sites can sometimes be complex. Always verify details with ODF. Get a copy of the Act and Rules. Ask ODF your questions before starting. You may also benefit from educational and technical assistance from the OSU Extension Service, consulting foresters and other specialists and organizations.

EASTERN OREGON AREA	3501 E. 3rd St.	Prineville, 97754	541-447-5658
Central Oregon District	3501 E. 3rd St.	Prineville, 97754	541-447-5658
John Day Unit	415 Patterson Brg. Rd.	John Day, 97845	541-575-1139
The Dalles Unit	3701 W. 13th St.	The Dalles, 97058	541-296-4626
Sisters Sub-unit	16721 Pine Tree Ln.	Sisters, 97759	541-549-2731
Fossil Sub-unit	45945 Hwy. 19	Fossil, 97830	541-763-2575
Klamath/Lake District	3200 DeLap Rd.	Klamath Falls, 97601	541-883-5681
Lakeview Unit	2290 N. 4th St.	Lakeview, 97630	541-947-3311
Northeast Oregon District	611 20th St.	La Grande, 97850	541-963-3168
Wallowa Unit	802 W. Hwy. 82	Wallowa, 97885	541-886-2881
Pendleton Unit	1055 Airport Rd.	Pendleton, 97801	541-276-3491
Baker Sub-unit	2995 Hughes Ln.	Baker City, 97814	541-523-5831
NORTHWEST OREGON AREA	801 Gales Creek Rd.	Forest Grove, 97116	503-359-7426
Astoria District	92219 Hwy. 202	Astoria, 97103	503-325-5451
Tillamook District	5005 E. 3rd St.	Tillamook, 97141	503-842-2545
Molalla Unit	14995 S. Hwy. 211	Molalla, 97038	503-829-2216
North Cascade District	22965 N. Fork Rd. SE	Lyons, 97358	503-859-2151
Forest Grove District	801 Gales Creek Rd.	Forest Grove, 97116	503-357-2191
Columbia City Unit	405 E St.	Columbia City, 97018	503-397-2636
West Oregon District	24533 Alsea Hwy.	Philomath, 97370	541-929-3266
Dallas Unit	825 Oak Villa Rd.	Dallas, 97338	503-623-8146
Toledo Unit	763 NW Forestry Rd.	Toledo, 97391	541-336-2273
SOUTHWEST OREGON AREA	1758 NE Airport Rd.	Roseburg, 97470	541-440-3412
Coos Unit	63612 Fifth Rd.	Coos Bay, 97420	541-267-4136
South Cascade District	3150 Main St.	Springfield, 97478	541-726-3588
Sweet Home Unit	4690 Hwy. 20	Sweet Home, 97386	541-367-6108
Southwest Oregon District	5286 Table Rock Rd.	Central Point, 97502	541-664-3328
Roseburg Unit	1758 NE Airport Rd.	Roseburg, 97470	541-440-3412
Grants Pass Unit	5375 Monument Dr.	Grants Pass, 97526	541-474-3152
Western Lane District	87950 Territorial Hwy.	Veneta, 97487	541-935-2283
Florence Unit	2660 Kingwood St.	Florence, 97439	541-997-8713

How waters of the state are classified and protected

The requirements of the Oregon Forest Practices Act are intended to protect fish, wildlife and water quality when forest management activities occur near waters of the state and within riparian management areas. Protection measures are based on how the water body near an operation is classified, as well as the geographic region. Protection measures apply even when the water body is dry.

What are waters of the state?

Lakes, bays, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, wetlands, inlets, canals and the Pacific Ocean within the territorial limits of the State of Oregon are waters of the state.

How are streams identified and classified?

A stream is a channel with a distinct bed or banks scoured by water that serves to confine water and that contains flowing water during some portion of the year. There are four stream types, based on use, and three stream sizes, which results in 12 possible classifications.

Stream types:

- Type F streams have fish and may also be used for domestic water.
- Type SSBT (salmon, steelhead or bull trout) streams are small or medium Type F streams that have salmon, steelhead or bull trout.
- Type D streams are used for domestic water and have no fish (more likely to be small streams).
- Type N streams have neither fish use of domestic water use.

Stream sizes (see illustration):

- Small streams have an average annual flow of 2 cubic feet per second or less, or have a drainage area less than 200 acres — they generally have widths less than 7 feet.
- Medium streams have an average annual flow greater than 2 and less than 10 cubic feet per second — they generally have widths of 7-12 feet.
- Large streams have an average annual flow greater than 10 cubic feet per second — they generally have widths of greater than 12 feet.

The combination of size and use designates each stream. For example, a medium-sized stream with fish would be called a “medium F” stream.

How are wetlands identified and classified?

Wetlands are areas that are often inundated or saturated by surface or ground water, which results in local vegetation that can tolerate or thrive in saturated soils. There are three major categories of wetlands:

SIGNIFICANT WETLANDS, WHICH INCLUDE:

- wetlands larger than 8 acres
- estuaries
- bogs
- important springs in eastern Oregon

STREAM-ASSOCIATED WETLANDS

These are wetlands less than 8 acres that are next to a stream. Protection requirements are based on the classification of the stream with which they are connected.

OTHER WETLANDS (INCLUDING SEEPS AND SPRINGS), WHICH INCLUDE:

- those greater than one-quarter acre
- those less than one-quarter acre

How are lakes identified and classified?

Lakes are bodies of year-round standing open water. They do not include bodies developed for human needs and not part of a stream, such as farm ponds. There are two kinds of lakes:

- large lakes, which are greater than 8 acres
- all other lakes

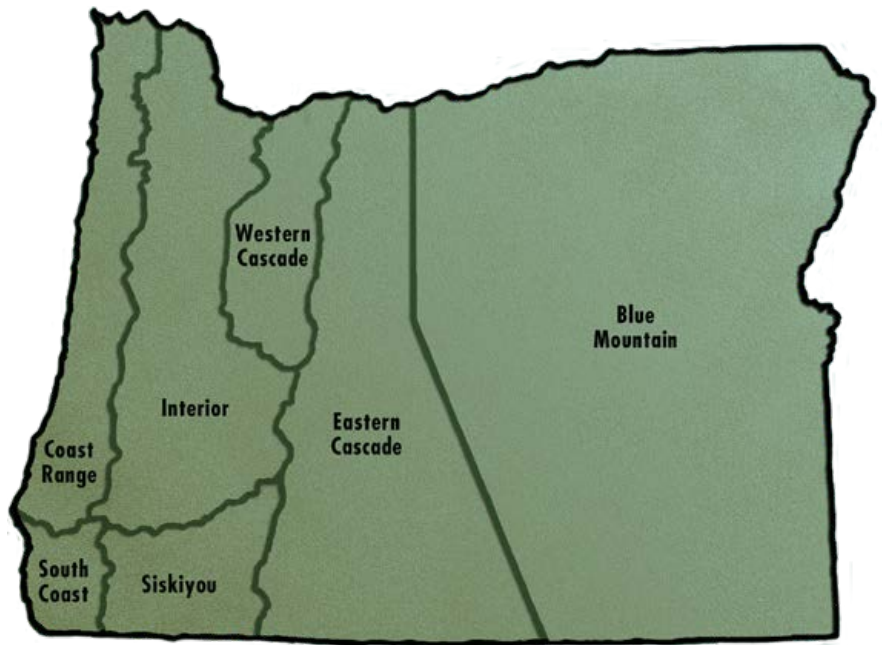


There are seven geographic regions for water protection.

The protection requirements for streams differ according to the geographic region in which the stream is located.

How can you identify the classification of your stream, wetland or lake?

ODF field offices have maps showing the classification of waters within the local area. The maps show known streams, lakes and significant wetlands, along with the size class and extent of fish or domestic water use. It is your responsibility to identify streams in proposed operations areas, including those that might not show up on ODF maps, and bring them to ODF's attention. ODF will tell you the classification of the streams after you file your Notification.

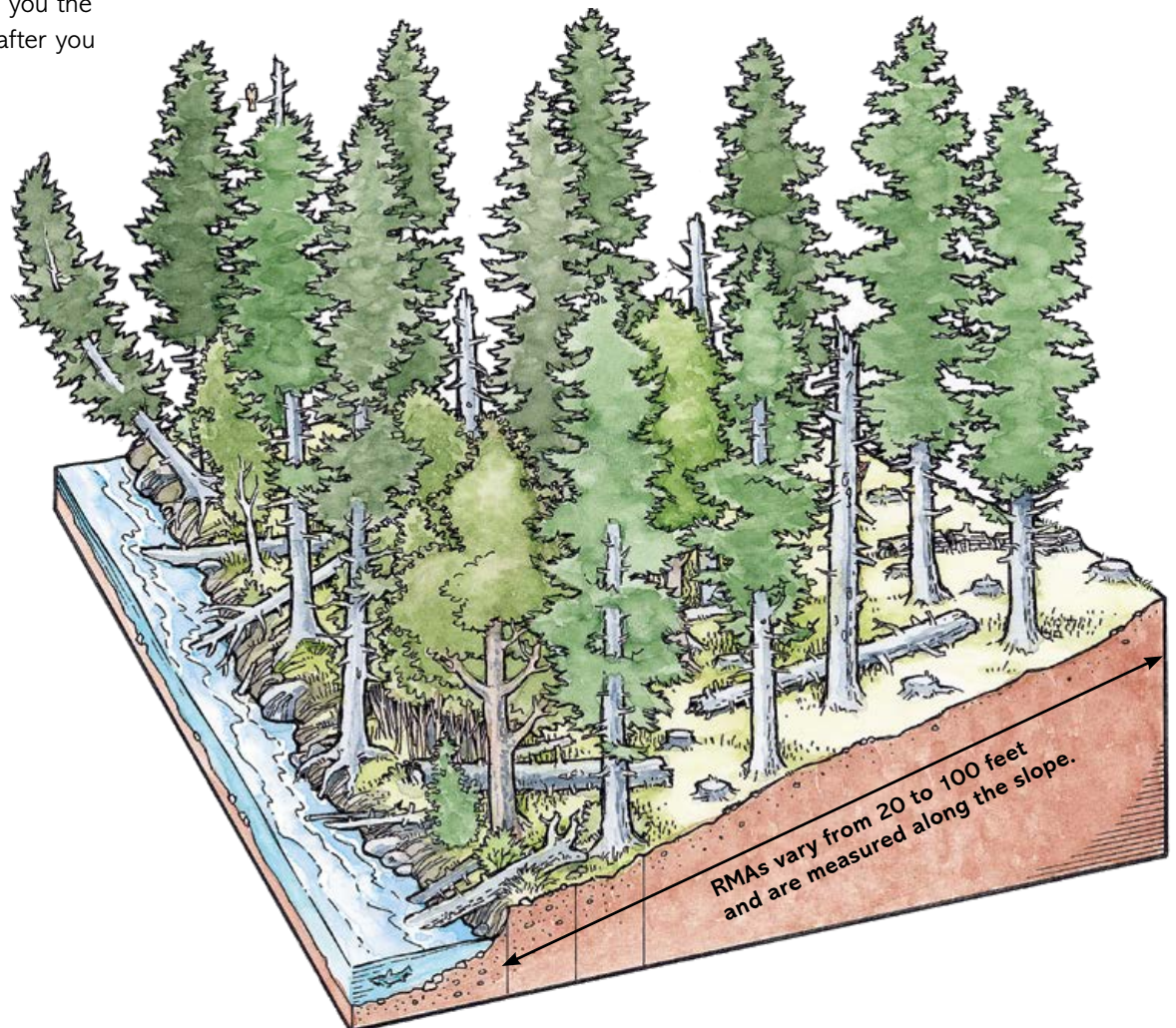


The state is divided into seven geographic water protection regions, each with its own protection requirements. Precise region boundaries can be found on ODF field office maps.

What are RMAs (riparian management areas)?

Unique “riparian” areas are found along the edges of streams, lakes, reservoirs, springs, marshes, bogs, ponds and seeps.

To help protect these water bodies, RMAs are locally specified and have requirements for retaining trees, snags and understory vegetation, and for limited or modified practices.



How RMAs help to protect key resources?

TOP, RIGHT: RMA plants, down logs and soils serve as a filter, trapping pollutants and keeping them from entering streams, wetlands and lakes.

CENTER, RIGHT: Many wildlife species, like this Columbia torrent salamander, rely on RMAs for the necessities of life: food, water, protection from predators and a place to rear young.

Do RMA widths differ?

Yes, depending on the stream type and size (see page 20).

Yes, depending on the size of the lake (see page 34).

Yes, depending on the kind of wetland (see page 36).

When there are two water features, use the dominant water feature RMA.

Is an RMA required for all waters of the state?

No, small Type N streams may not require a specific RMA, though some vegetation protection may be necessary — this is similar for other wetlands and other lakes without fish that are one-half acre or less.

What long-term benefits of RMAs are expected?

A primary goal of the RMA protection requirements is to develop more mature streamside forests (80 to 200 years old), especially those with conifer trees. Such forests provide channel shade, large logs that fall into the stream for fish habitat, bank-holding roots, snags for wildlife and quantities of leaves, needles, branches and insects that feed aquatic life. With time, the requirements are expected to promote conifer-dominated RMAs, while allowing for some trees to be harvested.



In the future, more streams will have mature forest in their RMA.

For more information, see:

You want to harvest timber on your property.
How do you plan for it? (page 13).

You want to harvest timber along a stream. What
do you need to know? (page 19).

You want to harvest timber near a lake. How do
you meet the requirements? (page 34).

You want to harvest timber in or near a wetland.
How do you meet the requirements? (page 36).

For other information sources, see the
Appendix, pages 197-198.

In RMAs that are conifer-growing sites but currently dominated by hardwoods, especially red alder, more extensive harvesting may be allowed so conifers can be planted. This requires a written plan (see page 143).



In RMAs where the native tree community is hardwood-dominated stands such as ash, cottonwood or maple, the goal is to retain and grow sufficient hardwood trees. Some harvesting may be needed for successful reforestation to replace dead and dying trees in such stands.

