

PLANNING

APPLICABLE OREGON FOREST PRACTICES RULES

Planning forest operations

- 629-605-0100: Compliance
- 629-605-0105: Notice of Federal Endangered Species Act
- 629-605-0110: Annual review
- 629-605-0120: Consultation
- 629-605-0130: Compliance with the rules and regulations of the Department of Environmental Quality
- 629-605-0140: Notification to the state forester — types of operations
- 629-605-0150: Notification to the state forester — when, where and how
- 629-605-0160: Forest practices regions
- 629-605-0170: Written plans
- 629-605-0173: Plans for an alternate practice
- 629-605-0175: Harvest Type 3 units exceeding 120 acres
- 629-605-0180: Interim process for protecting sensitive resource sites requiring written plans
- 629-605-0190: Written plans for operations near critical, threatened or endangered wildlife habitat sites
- 629-605-0200: Compliance with statutory requirements
- 629-605-0210: Harvest Type 3 units within single ownerships
- 629-605-0220: Judicial determinations of rule validity
- 629-605-0400: Forest activity safety
- 629-605-0500: Modification of requirements for forest health and public safety

Planning helps forest landowners scope out what they want to do on their land, determine which rules may apply and identify how to move forward. A management plan benefits any activity on the land and lays the foundation for deciding how to harvest timber.

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KNOW YOUR LAND



Many landowners find that creating a forest management plan helps them better understand their land.

Consider the resources on your land and think about your objectives before you start planning. You may want to produce some revenue, create wildlife habitat, manage for older forest structure or develop a fire-resilient forest. You might even have several goals you want to accomplish.

Many landowners find that taking the time to create a forest management plan helps them better understand their land and how they want to use it. The plan will look at all the resources on the property, including trees, roads, water sources, wildlife habitat and recreation. Putting together a forest management plan before harvesting timber helps ensure your forest management activities align with your property goals.

Planning for a timber harvest

Harvesting timber begins with a plan that varies depending on the landowner's goals. Yet, no matter the goal, a carefully crafted plan helps ensure the harvest meets requirements of the Oregon Forest Practices Act (OFPA) and leads to a smoother operation. Consider your management objectives, site conditions, resource protections, harvest type, and economic factors as you put the plan together. It's always a good idea to consult with your Oregon Department of Forestry (ODF) stewardship forester early in the process. Reforestation may be required following harvest.

This chapter deals with your initial work, from pre-planning a timber harvest to determining the harvest type. Other chapters will help you understand the reforestation and riparian management requirements.

CHECKLIST OF ITEMS TO CONSIDER

A lot goes into developing a plan for a timber harvest. This manual will help you understand what to consider and which rules apply, depending on your situation. You need to understand your site's riparian and wildlife resources, as well as steep slopes, before you finalize your harvest plan. Before harvesting, consider slash management, site prep, reforestation and any road maintenance needs.

This manual's appendix provides some additional information on selecting contractors, as well as a glossary and list of acronyms that will help you understand words and phrases that are new to you. A list of resources concludes the manual.

This checklist can help you as you move through preparing a plan for timber harvest:

MANAGEMENT OBJECTIVES

Many landowners approach forestland management with specific objectives that inform how they will plan for timber harvest. Often, a plan balances these objectives:

- income from timber:
 - > short- and long-term income needs
 - > markets
 - > tax considerations
- fish and wildlife habitat
- aesthetics
- recreation
- fire protection
- forest health

Help is available from ODF stewardship foresters, consulting foresters and forestry engineers to develop management plans, design timber harvest units and roads, contract loggers, and market your timber. Learn more at KnowYourForest.org.

RIPARIAN RESOURCES

- identify streams, wetlands and lakes, including stream surveys
- determine riparian management areas (RMAs)
- know protections needed during harvest
- establish vegetation retention
- follow necessary perennality stream protocols in advance of harvest

WILDLIFE RESOURCES

- be aware of threatened and endangered species' critical habitat
- determine sensitive wildlife resource sites
- develop protections for specific species, including critical nesting sites
- know requirements for leave trees, snags and down logs

STEEP SLOPES ON YOUR LAND

- identify high landslide hazard locations (HLHLs)
- consult the ODF steep slopes map
- take steep slopes training from ODF to understand requirements, if applicable
- learn about the small forestland owner (SFO) minimum option
- complete a written plan

HARVESTING

- review logging methods/water-crossing structures
- prevent fire during forest operations
- understand how to fell, buck and limb trees near water
- learn about ground-based and cable logging
- locate log landings
- know how to use petroleum products

SITE PREPARATION

- control vegetation after harvest and review:
 - > chemical use requirements
 - > application options and records
 - > water protection practices
- plan for management of slash
- understand prescribed burning options

REFORESTATION

- know requirements for reforestation
- learn standards and calculations
- understand landowner responsibilities
- understand basal area
- pre-order seedlings

Stay informed about reforestation

When you harvest timber or purchase cut-over land, you have a legal obligation to know if you need to reforest. Sellers of land with reforestation requirements must inform potential purchasers about the reforestation responsibility, as this obligation transfers to the new landowner.

ROADS

- construct new roads
- maintain roads
- perform a Forest Road Inventory and Assessment (FRIA) or Road Condition Assessment (RCA)
- learn requirements for abandoned roads

SITE CONDITIONS

Assess site conditions including:

- topography
- soil
- forest health
- forest stand type

RESOURCE PROTECTION

Identify and take action to protect the following resources:

- public improvements (e.g., county roads, state highways, hatcheries and campgrounds)
- cultural, archaeological and historical sites
- municipal water sources

TIMING OF OPERATIONS

Schedule your harvest operations and water-crossing work to minimize the following impacts:

- soil compaction and erosion
- excessive bark damage in the spring
- fish and wildlife disturbance during crucial times in their life cycles
- damage to roads and public resources
- accumulation of pine slash in eastern Oregon from January to June

E-Notification

You must notify ODF before starting a forest operation, at least 15 days in advance of any work. Forest landowners or their designee must file a Notification of Operation or Permit to Use Fire or Power-Driven Machinery by submitting an E-Notification through the Forest Activity Electronic Reporting and Notification System (FERNS), ferns.odf.oregon.gov/e-notification. You will need to create an account to access this web-based, centralized database of all forestry operations subject to ODF oversight. See Introduction for more information on notification requirements.

Completion Report: Using the E-notification system or other methods, landowners must notify ODF of completed activities at the end of the calendar year the notification was submitted or at the end of the next year, when operations continue into that year. Report completion for each activity covered in the original notification.

Any interested person or party can also subscribe to FERNS to receive electronic notifications of pending forest operations in their area. They can also review and submit official comments about forest operation work plans. Subscriptions need to be renewed annually.

Helicopter application of pesticides may require a 30-day notification. FERNS includes real-time communications about upcoming helicopter applications to neighbors living within one mile of the planned application site.

STEPS TO DETERMINE TIMBER HARVEST REQUIREMENTS



Wildlife trees like this snag provide habitat for birds and other wild animals.

Before you submit your E-Notification of timber harvest plans to ODF using FERNS, have this information ready:

- the harvest unit site class
- the harvest unit acreage
- the diameters and basal area of the trees you will leave standing

STEP 1: Decide on the kind of harvest (Type 1, 2, 3 or 4)

Refer to Table 1-1 on the next page. Landowners can choose among four broad types of harvest. That decision, along with harvest acreage, determines legal requirements for reforestation, limiting harvest unit size, and leaving wildlife trees and down logs.

Regardless of harvest type, forest landowners must protect streams, lakes, wetlands and wildlife sites. These topics, along with harvest slash disposal and forest fire regulations, are discussed later in this manual.

LEAVE TREE AND DOWN LOG REQUIREMENTS

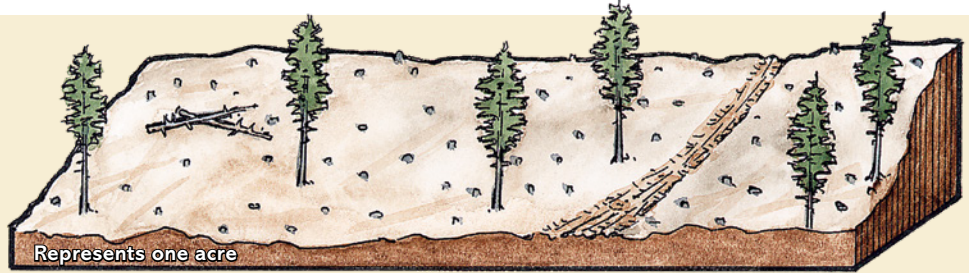
Leave at least two wildlife trees and two down logs per acre. For more detailed information, see the Wildlife chapter.

Table 1-1 Four types of harvest and their requirements

TYPE 1 HARVEST

Heavy thinning or shelterwood cutting so few or no seedlings, saplings or poles remain.

- Does not meet reforestation stocking standards.
- Must replant within two years and have “free-to-grow” seedlings within six years.*
- No wildlife trees or down logs are required if retaining an adequate basal area of trees 11 inches in diameter or larger (see Table 1-7).



TYPE 2 HARVEST

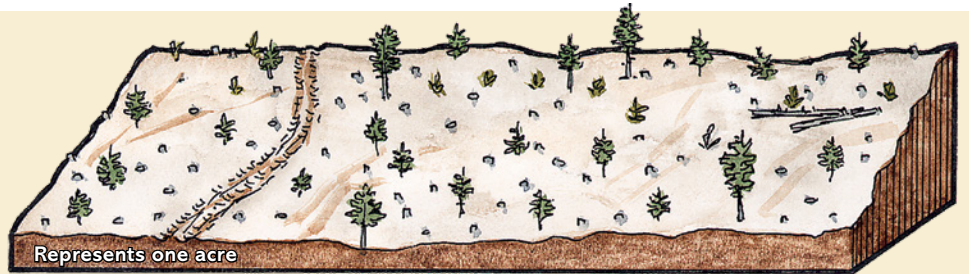
A clearcut in which the required seedlings, saplings and poles are left. The number of large trees is below Table 1-7 requirements.

Requirements for <25-acre harvests

- Meets the reforestation stocking standards.
- No reforestation required.

Requirements for >25-acre harvests

- Leave two wildlife trees and two down logs per acre.**
- No reforestation required.



TYPE 3 HARVEST

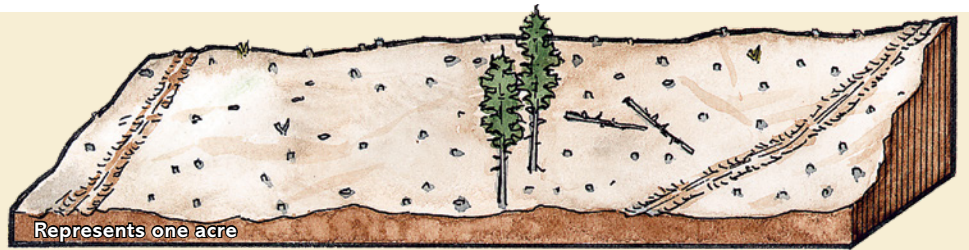
A clearcut where few seedlings, saplings or poles remain. The number of large trees is below Table 1-7 requirements.

Requirements for <25-acre harvests

- Does not meet reforestation stocking standards.
- Must replant within two years and have “free-to-grow” seedlings within six years.*

Requirements for >25-acre harvests

- Leave two wildlife trees and two down logs per acre.**
- Subject to 120-acre harvest unit size limitation.
- Must replant within two years and have “free-to-grow” seedlings within six years.*



TYPE 4 HARVEST

Commercial thinning to leave space between remaining trees, or a light, partial cut.

- Meets the reforestation stocking standards.
- No reforestation required.
- No wildlife trees or down logs are required if retaining an adequate basal area of trees 11 inches in diameter or larger (see Table 1-7).



*For full details about reforestation requirements, see the Reforestation chapter. **For more information about wildlife trees and down logs, see the Wildlife chapter.

STEP 2: Identify the harvest’s site class

Forests are classified by site class numbers according to how well trees grow. Trees grow faster in locations with fertile soils and plenty of moisture, and these areas have higher site classes. Trees grow more slowly in rocky soils and drier climates where the site class is lower. The Oregon Forest Practices Act (OFPA) uses six forest site classes ranging from I, the highest site class, down to VI, the lowest. These classes are based on forest productivity — how many cubic feet of wood an acre of forest can grow each year until the trees reach maturity and their growth slows down.

Several important requirements in the OFPA are based on site class. Table 1-2 shows groupings of site classes according to their wood production.

| Site class | I, II, III (High) | IV and V (Medium) | VI (Low) |
|---|-------------------|-------------------|----------|
| Annual forest growth (cubic ft. of wood volume per acre per year) | 120 plus | 50-119 | 20-49 |

Site class helps determine harvest type and reforestation stocking standards, requirements for harvest unit leave trees and down wood, and harvest size limitations.

WAYS TO DETERMINE SITE CLASS FOR YOUR HARVEST UNIT OR REFORESTATION AREA

- Contact your local ODF office for help.
- Hire a consulting forester to determine the site class for you.
- Determine the site class yourself. To do so, you will first calculate your “site index” using the instructions in the section below.

FINDING SITE INDEX TO DETERMINE SITE CLASS

Site index is a measure of the height (in feet) that forest trees will grow to at a specific age, usually 50 or 100 years, and in a particular location. A higher site index value indicates that trees grow faster and the forest is more productive. Site index varies for different tree species because each species has its own characteristic growth rate.

There are two options for finding the site index, which helps determine site class:

1. Check the soil survey published by the Natural Resources Conservation Service (NRCS) for most Oregon counties. Locate your harvest unit on the soil survey map, find your soil type, and note the site index for the primary tree species that grows in your area.

2. Measure site index directly by following these steps:
 - > Choose at least three trees, all the same species, that have grown with their crowns in the upper portion of the forest canopy.
 - > Measure and record the age and height for each tree:
 - To determine age**, use an increment borer to take a core sample from the tree at 4.5 feet (breast height) above the ground and count the growth rings. Add five to 10 years to the ring count to account for the number of years it took the tree to grow to breast height. This is the total age of the tree.
 - To determine height**, use a clinometer or angle-measuring device. Measuring tree height is not difficult, but it takes instruction and practice to be accurate.
 - > Use the table for your tree species to figure out the site index for each tree measured. For example, let’s say you measured a Douglas-fir tree in western Oregon that is 70 years old and 110 feet tall. Table 1-4 shows that the 100-year site index of the tree would be 130. That means that if the tree continues growing to age 100, it is expected to grow to about 130 feet tall. Tables 1-4, 1-5 and 1-6 allow you to find Douglas-fir site indexes (100- or 50-year basis) and ponderosa pine site indexes (100-year basis).

Now, determine your site class: Take the site index figure from Tables 1-4, 1-5 or 1-6 and plug it into Table 1-3 to find the corresponding site class. For example, the Douglas-fir tree that had a 100-year site index of 130 is in the “high” category, which includes Site Classes I, II and III.

A publication from Oregon State University Extension Service, called *Tools for Measuring Your Forest*, can help you find the site index for your property. It includes instructions on how to use an increment borer, clinometer and other forest measurement tools.

| Site class | I, II, III (High) | IV and V (Medium) | VI (Low) |
|---|-------------------|-------------------|-------------|
| Douglas-fir site index (100-year basis, westside) | 124 or more | 80-123 | Contact ODF |
| Douglas-fir site index (50-year basis, westside) | 92 or more | 70-91 | Contact ODF |
| Ponderosa pine site index (100-year basis) | 109 or more | 64-108 | 40-63 |

| Table 1-4 Site index for Douglas-fir, western Oregon, 100-year basis | | | | | | | | | | | | | | |
|--|---------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Total age (years) | Total height (feet) | | | | | | | | | | | | | |
| 20 | 21 | 24 | 26 | 29 | 31 | 34 | 37 | 39 | 42 | 44 | 47 | 49 | 52 | 54 |
| 30 | 37 | 41 | 46 | 50 | 55 | 60 | 64 | 69 | 74 | 78 | 83 | 88 | 92 | 96 |
| 40 | 48 | 54 | 60 | 66 | 72 | 78 | 84 | 90 | 96 | 102 | 108 | 114 | 120 | 126 |
| 50 | 56 | 63 | 70 | 77 | 84 | 91 | 98 | 105 | 112 | 119 | 125 | 132 | 139 | 146 |
| 60 | 63 | 70 | 78 | 86 | 93 | 101 | 109 | 117 | 124 | 132 | 140 | 148 | 156 | 163 |
| 70 | 68 | 77 | 85 | 94 | 102 | 110 | 119 | 127 | 135 | 144 | 152 | 161 | 170 | 178 |
| 80 | 73 | 82 | 91 | 100 | 109 | 118 | 127 | 136 | 145 | 154 | 163 | 172 | 181 | 190 |
| 90 | 77 | 86 | 96 | 105 | 115 | 125 | 134 | 144 | 153 | 163 | 172 | 182 | 192 | 201 |
| 100 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 | 210 |
| Site index | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 | 210 |

| Table 1-5 Site index for Douglas-fir, western Oregon, 50-year basis | | | | | | | | | | |
|---|---------------------|----|----|----|-----|-----|-----|-----|-----|-----|
| Age (years, at DBH) | Total height (feet) | | | | | | | | | |
| 10 | 16 | 18 | 20 | 22 | 24 | 27 | 29 | 32 | 34 | 37 |
| 20 | 30 | 35 | 40 | 44 | 49 | 54 | 59 | 63 | 68 | 73 |
| 30 | 42 | 49 | 56 | 63 | 70 | 76 | 83 | 90 | 97 | 103 |
| 40 | 53 | 61 | 69 | 78 | 86 | 95 | 103 | 112 | 120 | 129 |
| 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 |
| Site index | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 |

| Table 1-6 Site index for ponderosa pine, 100-year basis | | | | | | | | | | | | | |
|---|---------------------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|
| Total age (years) | Total height (feet) | | | | | | | | | | | | |
| 20 | 6 | 9 | 12 | 16 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 30 | 11 | 15 | 20 | 26 | 32 | 38 | 44 | 51 | 57 | 64 | 70 | 77 | 84 |
| 40 | 16 | 22 | 28 | 35 | 42 | 49 | 55 | 63 | 70 | 77 | 85 | 93 | 100 |
| 50 | 21 | 28 | 35 | 43 | 51 | 58 | 65 | 73 | 80 | 89 | 97 | 105 | 113 |
| 60 | 26 | 34 | 42 | 50 | 58 | 66 | 73 | 81 | 90 | 99 | 107 | 115 | 124 |
| 70 | 30 | 39 | 47 | 56 | 64 | 73 | 80 | 89 | 98 | 108 | 116 | 125 | 134 |
| 80 | 34 | 43 | 52 | 61 | 70 | 79 | 88 | 97 | 106 | 116 | 124 | 133 | 143 |
| 90 | 37 | 47 | 57 | 66 | 75 | 85 | 94 | 104 | 113 | 123 | 132 | 142 | 152 |
| 100 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 |
| Site index | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 |

STEP 3: Determine how many acres the timber harvest unit will cover

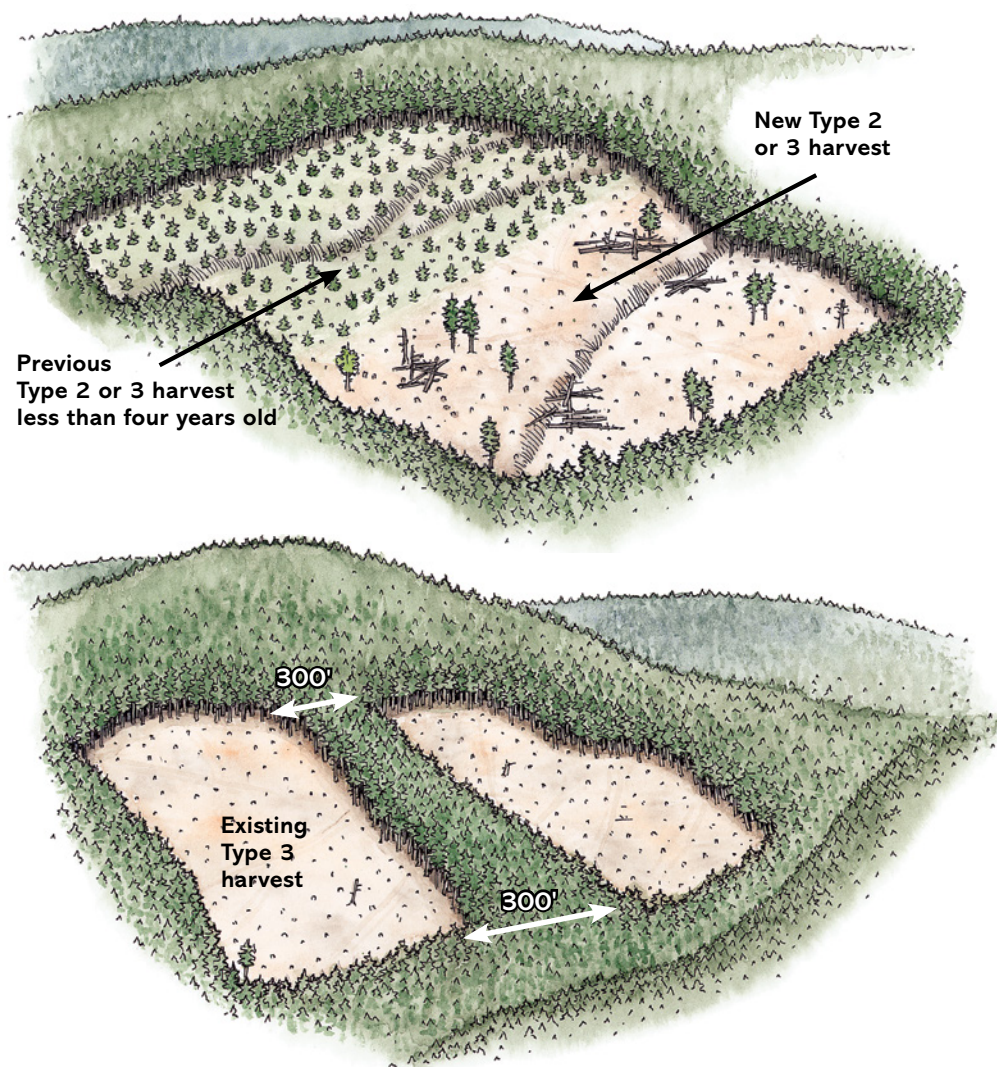
The OFPA limits clearcuts to 120 acres. Adjacent land in the same ownership cannot be clearcut until new trees on the original harvest site are at least four feet tall or are four years old and the stand is “free-to-grow.” Refer to the Wildlife chapter for specific rules.

Accurate acreage measurements are your responsibility. Figure out the size of your harvest unit using a scaled aerial photograph, topographic map or global positioning system. The FERNS system provides several types of base maps you can use to draw and edit your harvest unit boundary and calculate the acreage.

STEP 4: Decide which leave trees will be on the harvest unit

The number of leave trees and their diameters are two of the keys to determining the type of harvest you intend and the requirements that will apply to the harvest unit.

Measure the trees you plan to leave in the timber harvest unit. Tree diameter is measured 4.5 feet above the ground, on the uphill side of the tree, and is referred to as diameter at breast height (DBH). Refer to Table 1-7 and the Wildlife chapter.



STEP 5: Check to see if the logging operation is likely to be active during a “declared fire season”

A “declared fire season” exists when the local risk of wildfire is identified as significant — a period often extending from early July to October. During this time, operators are required to be alert and able to suppress a small fire, with equipment on-site. They must also meet daily fire watch requirements and have additional liability for a fire originating in the timber harvest unit. See the Harvesting chapter for more information.

STEP 6: Find out if a written plan is required

Written plans protect streams, wetlands, bird sites and public safety. Sometimes the requirements for a written plan may be waived. For more information about written plan requirements, see page 28.

Table 1-7 Leave trees and site class

When planning a harvest of 25 or more acres, leave standing the amount of trees in columns two or three, or leave at least two wildlife trees and two down logs per acre.

| Site class | Number of trees per acre at least 11 inches at DBH | OR | Square feet of basal area per acre of 11-inch or larger trees |
|---------------|--|----|---|
| I, II and III | 50 | | 33 |
| IV and V | 30 | | 20 |
| VI | 15 | | 10 |

TIMBER HARVEST SCENARIOS

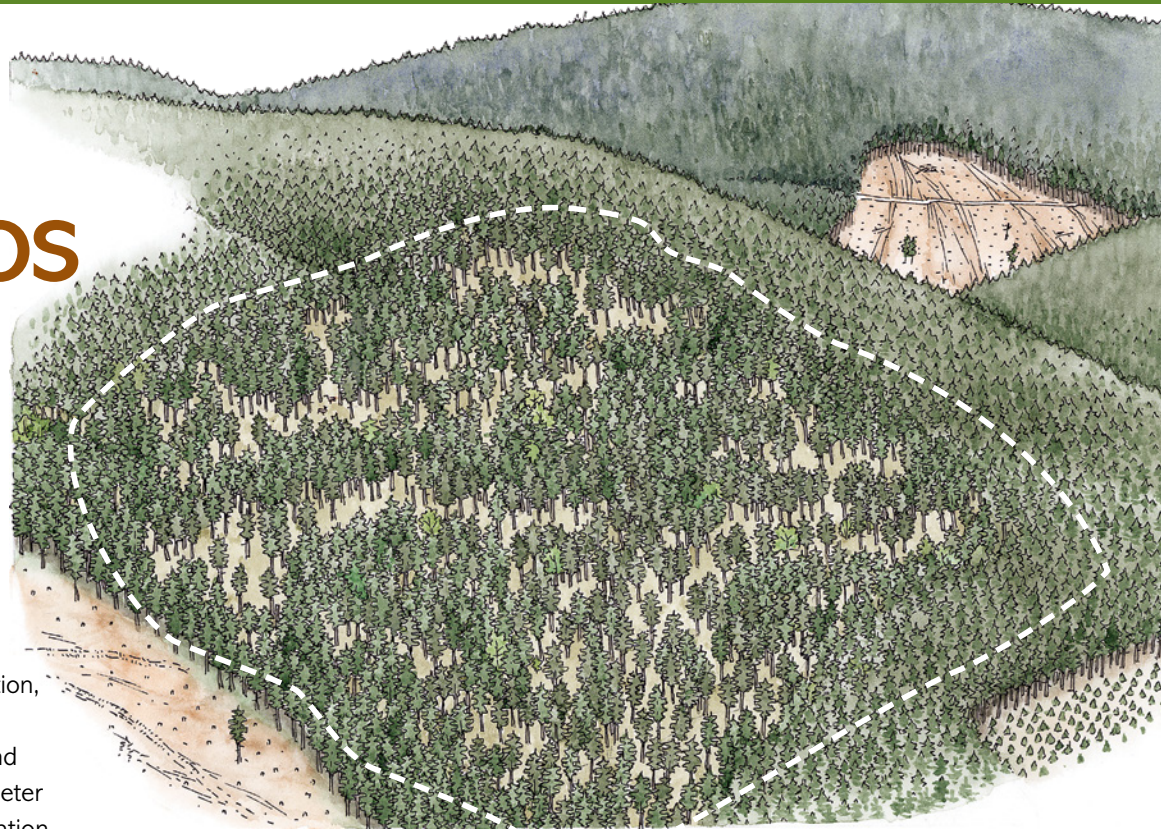
Will there be a reforestation requirement after harvest?

Using the example in the illustration, let's determine if the stocking of seedlings, saplings and poles, and trees 11 inches or larger in diameter meets the standards for reforestation for Site Class III forestland. Note: Standards are different for each site class; see Table 6-1 in the Reforestation chapter to find the standards for all site classes. Landowners can decide to plant or leave an "equivalent combination" determined by the "equivalent calculation" formula described in the Reforestation chapter.

One option: Reforestation required.

The landowner plans to remove most of the trees, leaving some scattered trees that add up to about 10 square feet of basal area per acre. Because the stand is very dense, not many saplings or seedlings will remain after harvest. In this case:

- Trees left after harvest will be less than the reforestation stocking standards for Site Class III forestland, so reforestation will be required.
- The harvest unit size is more than 25 acres and there will be less than 33 square feet of basal area, so wildlife trees and down logs will have to be left (see Table 1-7).



Harvest unit example: Site Class III (high); harvest size 35 acres; leaving 90 square feet per acre of trees with 11-inch DBH or larger.

- Based on the illustrations and descriptions in Table 1-1, timber harvest Type 2 and Type 3 might match these changed harvest goals. Because both reforestation and wildlife trees are required, it must be a Type 3 harvest.
- Type 3 harvests have one more restriction: They are limited to 120 acres unless ODF reviews a written plan for an exemption before logging.

Another option: No reforestation required. Although the forest could be clearcut, you've decided to first thin trees to provide some income and improve the growth and vigor of the remaining stand. You plan to leave at least 90 square feet of basal area per acre in 11-inch DBH or larger trees. With this decision, you meet or exceed the reforestation rule standard for Site Class III forestland. No reforestation, which usually involves planting seedlings, will be required.

WHAT ARE SEEDLINGS?

Seedlings are live trees of acceptable species of good form and vigor with a DBH of less than 1 inch.

WHAT ARE SAPLINGS AND POLES?

Saplings and poles are live trees of acceptable species of good form and vigor with a DBH of 1-10 inches.

What about leaving wildlife trees and down logs?

(See also the Wildlife chapter.)

One option: Originally, you planned a harvest of 25 acres or less, so wildlife trees, snags and down logs would not be required. However, you need a bit more income this year to cover some expenses, so you harvest about 35 acres. You now need to determine if the trees you intend to leave after harvest will meet or exceed the standards in Table 1-7.

Another option: You could also keep 90 square feet of basal area per acre of trees with a DBH of 11 inches or larger. That is higher than the Site Class III reforestation standard of 80 square feet. As a result, leave wildlife trees and down logs are not required.

What type of harvest will it be?

Use Table 1-1 to determine harvest type. You have a vision of how the forest will look after harvest, and it seems to match the illustration and description for the Type 4 harvest. A Type 4 harvest has no requirement for reforestation or wildlife trees. The Type 4 harvest matches your planned harvest.

SEEDLING SOURCES

There are many sources for seedlings in Oregon. Be sure to consider ordering seedlings at least a year in advance of needing to plant them. Before ordering, determine the species, type and size of seedlings and when they will be available for planting. At some times, seedling supplies are very tight, so planning ahead several years can be beneficial. Plan to plant more than the minimum number of trees per acre to allow for seedling losses.

Legally, landowners must replant within 24 months after a clearcut or heavy partial cut. Planting requirements range from 200 trees per acre for most of western Oregon to 100-125 trees per acre for dry pine sites in eastern Oregon. By the end of the sixth year, trees must be “free-to-grow.”

ODF publishes an annual catalog, *Sources of Native Forest Nursery Seedlings*, to help landowners find suitable tree stock for their planting goals. It provides information about:

- seed zones, including maps that show where a seed was collected and can be safely transplanted
- genetically improving seedlings
- selecting seed sources
- forest seedling nurseries
- resources to help during reforestation



MAPPING TOOLS

ODF offers extensive maps and data on its website, oregon.gov/odf. Its GIS Hub provides geospatial data, applications, published maps and resources to support stewardship of Oregon’s forests. You’ll also find ODF district maps, fire protection district maps and a state/U.S. Forest Service ownership map. Soil survey maps are also available from the Natural Resources Conservation Service (nrcs.usda.gov).

Landmapper (oregon.landmapper.ecotrust.org/landmapper), a simple online tool, can be used to create maps of your property in Oregon, including aerial photos, street maps, topography, streams and soil types.

CULTURAL RESOURCES

Cultural resources are archaeological sites or objects found on public or private lands.

Typical indications of archeological sites include stone tools, fire-cracked rock, shells, bone fragments and things like house pit depressions, hearths, fire rings, cairns (heaps of stones that signify memorials or landmarks) and similar items. Glassy rock fragments, along with tools and debris from making them — in an area where they are not normally found — may also indicate archaeological sites.



Importance and age

The number of archaeological sites is limited. They are irreplaceable and nonrenewable. They are also an inherent part of the cultural heritage of Oregon.

Cultural resources include more than prehistoric or Native American artifacts. Even old logging remains, stumps with springboard notches, camp dumps, railroad grades, homestead cabins, historic irrigation ditches, scribed trees and trails are included in the definition of cultural resources. In addition to artifacts, traditional hunting and gathering sites and religious sites may also be historical cultural records.

Legal protections

Oregon laws protect archaeological objects and sites.

The State Historic Preservation Office maintains a comprehensive, statewide inventory of sites, structures and objects that are potentially significant to Oregon's history, prehistory, architecture, archaeology and culture. This office is part of the Oregon Parks and Recreation Department.

If human remains are encountered during excavation, operations must be stopped. Report them to the landowner, the state police, the State Historic Preservation Office and the Commission on Indian Services.

ODF cannot provide cultural resource advice or guidance. For that information, landowners are directed to the State Historic Preservation Office at 503-986-0690.

oregon.gov/oprd/oh/pages/default.aspx

SCENIC HIGHWAYS

Oregon’s popular scenic highways are often bordered by forestlands. When located along certain designated scenic highways, these lands have unique timber harvest requirements to help maintain the public’s enjoyment of roadside trees.

Scenic highways are designated by the Oregon Legislature to create a buffer and limit the visual impact of logging operations. A visually sensitive corridor is 150 feet wide, and the adjacent stand provides a 150- to 300-foot buffer. Landowners will receive a notification if there is a scenic highway designation after they submit a Notification of Operation through FERNs. Alternate plans can be submitted for consideration by an ODF stewardship forester.

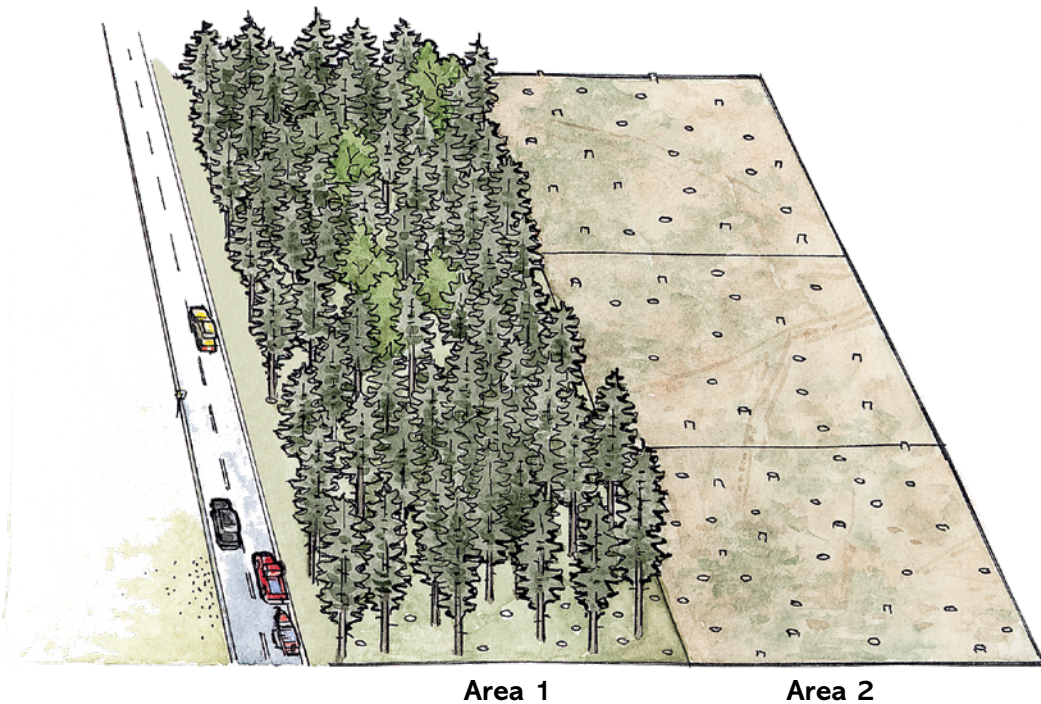
Three scenarios are exempt from the scenic highway requirements:

- timber harvests along highways within urban growth boundaries
- harvests on lands zoned as rural residential
- harvests on single ownerships of less than 5 acres

Scenic highways

Interstate: 5, 84, 204 and 405

State: 6, 7, 20, 18, 22, 26, 27, 30, 31, 34, 35, 36, 38, 42, 58, 62, 66, 82, 97, 101, 126, 138, 140, 199, 230, 234 and 395



Harvest areas within a visually sensitive corridor must be cleared of large timber harvest debris within 30 days of harvest completion or within 60 days of cessation of active harvest activity. If the harvest is Type 1 or Type 3, reforestation must be completed by the end of the first planting season following the harvest.

Oregon’s scenic highway requirements apply to the “visually sensitive corridor” that extends 150 feet from the edge of the highway (Area 1 in the illustration). This distance is measured on the slope, along both sides of a scenic highway. The “edge of the highway” means the fence for interstate highways and the outermost edge of the pavement for state highways.

Requirements

Owners have two options for temporarily leaving trees within the 150-foot corridor (Area 1):

- Leave at least 50 healthy trees with a DBH of 11 inches or larger on each acre. This number is a minimum, not an average. Hardwoods make good visual screens, so conifers do not have to be left if there are enough hardwoods. The trees on each acre are intended to be distributed throughout the visual corridor.
 Note: One acre of scenic corridor 150 feet wide will be approximately 290 feet long.
- Leave at least 50 healthy trees that are 40 square feet of basal area on each acre.
 Note: 50 trees per acre = 17 trees per 100 feet of corridor length.

Harvesting temporary trees

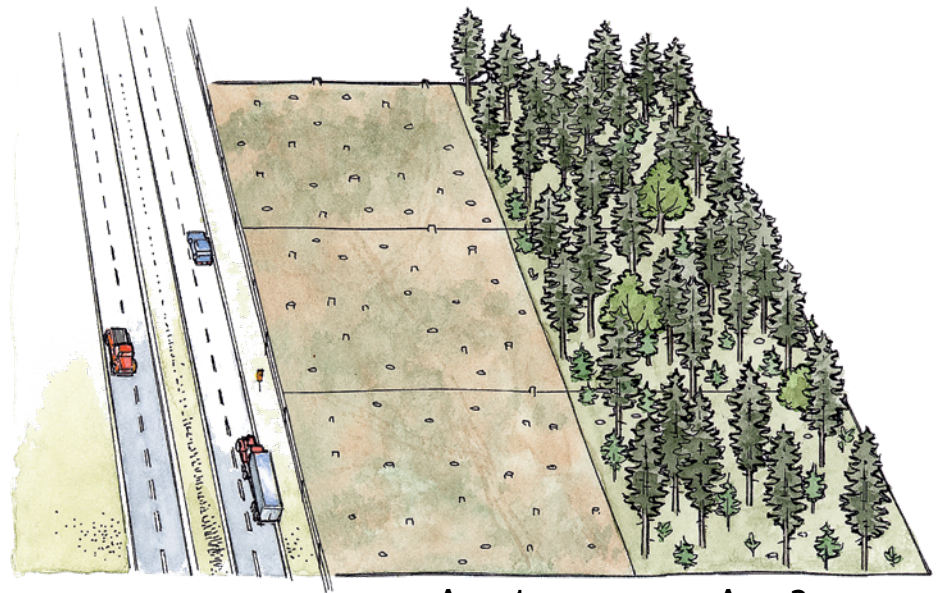
Temporary trees may be removed when both of the following conditions are met: the new trees in the corridor understory reach an average height of 10 feet, and the corridor contains the minimum per-acre number of free-to-grow seedlings or saplings required for reforestation. (See the Harvesting chapter.)

An alternative rule applies when the area extending from 150 to 300 feet from the edge of the highway (Area 2) has at least 40 square feet of basal area, or when it contains the minimum per-acre number of free-to-grow seedlings or saplings required for reforestation and these trees have an average height of 10 feet. In that case, no trees are required to be left in the visually sensitive corridor, or trees initially left may be removed. (See illustration, right.)

If the stocking in the scenic corridor (Area 1) is already below 50 healthy trees on each acre, Area 2 cannot be harvested until Area 1 is reforested and the stand has attained an average height of 10 feet.

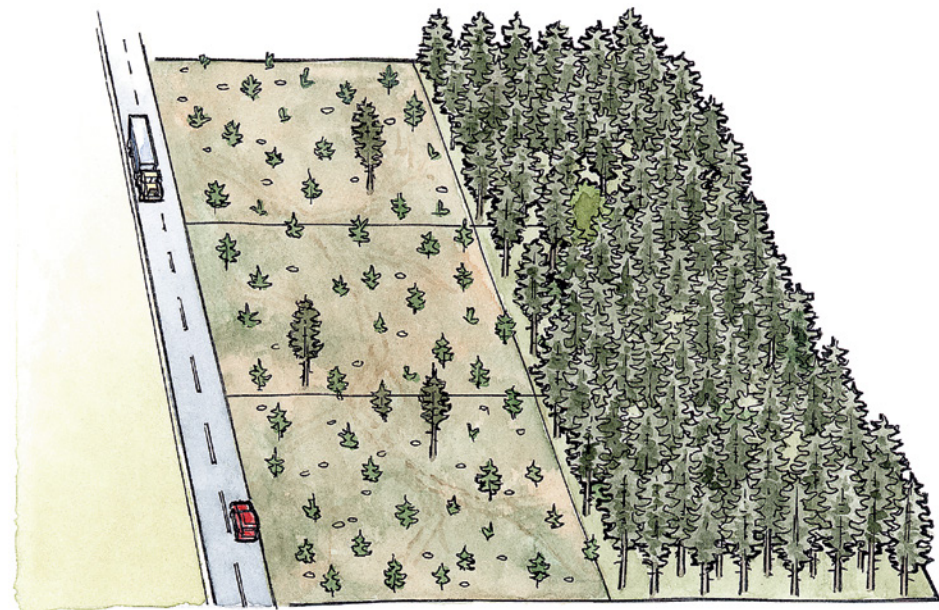
Liability for injury or damage from trees left in corridors

When complying with scenic corridor requirements, landowners and operators are not liable for injury or damage caused by trees left in those corridors. Where public safety is a serious concern, the Oregon Department of Transportation may encourage or prescribe removal of specific trees growing along highways.



Area 1

Area 2



Area 1

Area 2

Modifications or waivers

ODF may approve modifications or waive scenic corridor requirements under the following circumstances:

- to maintain motorist safety
- to protect improvements such as dwellings or bridges
- to protect forest health
- to provide the motoring public with exposure to distant scenic vistas
- when trees that are required to be left are not visible to motorists
- when a land use change is inconsistent with a visually sensitive corridor
- when the requirements will result in severe economic hardship for the owner because nearly all of the owner's property is within the corridor

WRITTEN PLANS

Several parts of this manual mention requirements for written plans. Some harvest activities require operators to submit a written plan to ODF in addition to their Notification of Operation. An operator, timber owner or landowner must prepare the plan and describe the details of their operations. Written plans allow ODF stewardship foresters to work with operators to help them meet OFPA requirements.

There are two kinds of written plans:

Statutory written plans

ODF stewardship foresters must review submitted statutory plans. They may comment, but they won't provide a formal approval. If a waiting period is required, it cannot be waived. These plans do not apply to operations conducted under a stewardship agreement. The following activities require statutory plans:

- operations within 100 feet of a Type F, SSBT or D stream, even when dry (see Introduction)
- operations within 100 feet of wetlands larger than 8 acres (see the Riparian Management chapter)
- operations within 300 feet of areas identified by ODF as important for certain wildlife species

A statutory written plan may not be required if the operation activity will not directly affect the physical components of the riparian management area (RMA). For more information, check with your local ODF stewardship forester or see Forest Practices Act Technical Note 10: Statutory Written Plans, available on ODF's website, oregon.gov/odf.

Items needed in every written plan:

- a legal description or reference to a Notification of Operation number
- a map showing the proposed operation, the protected resource, and section lines, access roads and other important landscape features
- a complete description of the planned operation
- a description of the resource site(s) you are planning to protect

Non-statutory written plans

These plans are like statutory written plans, except that ODF stewardship foresters can waive or reduce a required waiting period. They review these plans but do not provide a formal approval. The following activities require a non-statutory written plan:

- building road fills deeper than 15 feet
- operations within 100 feet of a large lake
- operations on high landslide hazard locations (HLHLs)
- road construction with the risk of material entering bodies of water
- burning in a riparian management area (RMA)
- locating a log landing in an RMA
- road construction in an RMA
- stream crossings with fills 15 feet or higher
- temporary stream crossings with fills 8 feet or higher
- placement of wood in Type F, SSBT or N streams
- vegetation retention modification along Type F or SSBT streams
- vegetation modification along Type D and N streams
- locating a yarding corridor in an RMA
- activities that affect sensitive wildlife habitat
- machine activity in stream channels
- alternate practices
- beaver dam removal
- conversion of forestland to a non-forest use

ALTERNATE PRACTICES

The Oregon Forest Practices Act provides landowners and operators with an option to modify specific requirements in the law and its rules, if comparable or better protection of forest resources can be achieved. This approach requires submitting to ODF for approval a “Plan for an Alternate Practice,” a document prepared by the landowner, operator or timber owner describing the proposed practices that would differ from those specified in the applicable law or rule.

Landowners and operators who are considering alternate forest practices or methods should contact ODF early; not only can staff provide helpful guidance, but a written plan and formal approval are also required before operations can begin. The written plan must describe in sufficient detail the alternate practice and how it would yield results equal to or better than the standard forest practice requirements. Once the written plan is approved by ODF, the alternate practice effectively becomes the forest practice rule the landowner or operator must follow, and all provisions of the written plan must be met.

These are examples of situations for which approval of alternate practices may be granted:

- management actions for reasons of forest health, public safety or safety hazards
- specific practices that will improve soil, water quality, or fish or wildlife habitat
- necessary management following a disaster, storm, pest or disease epidemic
- when required forest practices would conflict with resource site protection
- to exceed the 120-acre clearcut size limit
- to modify the reforestation requirements
- to modify the tree retention requirements along streams, wetlands or lakes
- to convert forestland to non-forest use
- to conduct activities unique to a bona fide research project
- to modify the requirements for special resource sites (threatened fish and wildlife, sensitive birds, significant wetlands, etc.)



Situations where ODF may approve alternative practices include necessary management following a natural disaster.

