

# Glossary

<b>“4(d) rule”</b>	A rule under Section 4(d) of the federal Endangered Species Act that requires protective measures to prevent further damage to a threatened species. A 4(d) rule covers only a threatened species; endangered species are automatically afforded the full protection of the law without any flexibility in rulemaking.
<b>Activity center (northern spotted owl)</b>	A nest site or primary roost area for northern spotted owls.
<b>Activity zone (recreation)</b>	A zone in the forest designated for one of a range of motorized and non-motorized uses. Zoning separates conflicting uses and facilitates design of trails for multiple-use and single use recreation.
<b>Adaptive management</b>	An approach to resource assessment and management that explicitly acknowledges uncertainty about the outcomes of management policies, and deals with this uncertainty by treating management activities as opportunities for learning how to manage better. Adaptive management is a system of making, implementing, and evaluating decisions, which recognizes that ecosystems and society are always changing. It is a systematic, rigorous approach for learning from our actions, improving management, and accommodating change.
<b>All-terrain vehicle (ATV)</b>	A motorized off highway vehicle designed for or capable of travel cross-country, which is being operated off a highway. Includes 4-wheel drive vehicles, motorcycles, snowmobiles, and small vehicles traveling on 3 or more low pressure tires.
<b>Alluvial</b>	Describes soil, debris, and other materials that have been deposited by currents of water.
<b>Aquatic</b>	In or on the water; aquatic habitats are in streams or other bodies of water, as contrasted to riparian habitats, which are near water.
<b>Basal area</b>	The area of the cross-section of a tree stem near the base, generally at breast height (4.5 feet above the ground) and including the bark. The basal area per acre is the total basal area of all trees on that acre.

<b>Best Management Practices</b>	Oregon Forest Practices Act rules adopted by the Board of Forestry to minimize the impact of forest operations on water quality. These rules ensure that, to the maximum extent practicable, forest operations meet the water quality standards established by the Environmental Quality Commission. The rules focus on reducing nonpoint source discharges of pollutants resulting from forest operations.
<b>Biodiversity</b>	Society of American Foresters defines biodiversity as “the variety and abundance of species, their genetic composition, and the communities, ecosystems, and landscapes in which they occur.”  Gast et al. 1991 characterizes biodiversity operationally as: “... the variety, function, distribution, and structure of ecosystems and their components, including all successional stages, arranged in space over time that support self-sustaining populations of all natural and desirable naturalized flora and fauna.”
<b>Board foot</b>	The amount of wood equivalent to a piece of wood one foot wide by one foot high, by one inch thick. See MBF and MMBF.
<b>Board of Forestry (BOF)</b>	Oregon Board of Forestry. Members are appointed by the Governor.
<b>Class I-III (cultural resources)</b>	Categories for protection of cultural resources, ranging from legally mandated protection to no protection, for sites with little or no significance.
<b>Clearcut</b>	The standard definition for “clearcut” refers to removal of all trees in a stand. In Oregon state forests, clearcuts are modified to leave residual green trees and snags specifically for their biological or environmental values.
<b>Climax tree species</b>	Climax forest refers to the stage in plant succession where the vegetation has reached a highly stable condition and changes very slowly (until catastrophic disturbance occurs, such as wildfire, flood, or an insect or disease outbreak). In the hemlock zone of the Oregon Coast Range, western hemlock, western redcedar, and Sitka spruce are the major climax tree species
<b>Closed single canopy (CSC)</b>	This stand type occurs when new trees, shrubs, and herbs no longer appear in the stand, and some existing ones begin to die from shading and competition, in a process called stem exclusion.

<b>Cluster</b>	In the <i>Northwest State Forests Management Plan</i> , areas of existing highest quality northern spotted owl habitat are designated as owl clusters. These will be protected and managed for the purpose of improving the habitat quality over time and providing “seed stock” for colonization of future owl habitat.
<b>Colluvial</b>	Describes soil, debris, and other materials that have been moved downslope by gravity and biological activity.
<b>Common School Forest Lands (CSFL)</b>	Common School trust lands that have been listed by the State Land Board for the primary use of timber production. The goal in managing these lands is the generation of the greatest amount of income for the Common School Fund over the long term, consistent with sound techniques of land management.
<b>Complex structure</b>	Complex structure of a forest stand refers to layered canopy or older forest structure. Vertical layering of herbs, shrubs, and tree crowns is extensive. Plant communities are complex in terms of numbers of species and in vertical arrangement. Shrub or herb layers and tree canopies in two or more layers are present.
<b>Corridor</b>	Areas of habitat that connect separate but similar habitat patches, within the landscape mosaic. For example, an area of mature timber may connect larger patches of mature timber.
<b>CSC</b>	See “closed single canopy.”
<b>CSFL</b>	See “Common School Forest Lands.”
<b>Cultural resources</b>	Cultural resources are defined as any human-created sites, structures, or objects that are of historical significance to the local area, region, state, or nation, in providing information and education of ethnic, religious, or social groups, activities, or places.
<b>Cutslope</b>	Slope created by cutting a road into a hill-slope.
<b>DBH</b>	Diameter at breast height: diameter of a tree measured at 4.5 feet above ground.
<b>Debris slide</b>	Rapid landslide occurring on a slope. The material moved may include soil, wood, and vegetation. The slide may or may not reach a stream channel. See also “landslide.”
<b>Desired future condition (DFC)</b>	An explicit description of the physical and biological characteristics of the northwest Oregon state forests in the future, as described in the forest vision.
<b>Disturbance</b>	A force that causes significant change in an ecosystem’s structure and/or composition; can be caused by natural events or human activities.

<b>Drainage basin</b>	A clearly defined area, usually bounded by ridges or other similar topographic features, encompassing part, most, or all of a watershed.
<b>Endangered Species Act (ESA)</b>	State and federal Endangered Species Acts protect threatened and endangered (T&E) species. The Oregon and federal ESAs identify T&E species, monitor candidate species, designate critical habitat, develop recovery plans and restrict take of endangered fish and wildlife. The federal ESA applies to federal lands and federal actions, including approval of an incidental take permit.
<b>Forest Land Management Classification System (FLMCS or LMCS)</b>	ODF land management classifications are required by administrative rule, and describe the types of management the department will apply to particular areas of the land base, the appropriate range of management activities for these areas, and the forest resource or resources the classification is intended to address.
<b>Fragmentation</b>	The relationship of the landscape matrix to other types of patches; as fragmentation increases, the matrix becomes smaller and geometrically more complex. Maximum landscape fragmentation occurs when no dominant patch exists.
<b>Function</b>	Activity or process that goes on in an ecosystem; some typical functions are plant growth, animal reproduction, decay of dead plants.
<b>Geographic information system (GIS)</b>	A computer system that stores and manipulates spatial data, and can produce a variety of maps and analyses.
<b>Geotechnical</b>	The study of soil stability in relation to engineering.
<b>GIS</b>	See “geographic information system.”
<b>Habitat conservation plan (HCP)</b>	A comprehensive planning document that is a mandatory component of an incidental take permit application pursuant to the federal Endangered Species Act.
<b>Headwall</b>	The steep slope or rocky cliffs at the head of a valley.
<b>Hydrology</b>	Study of the properties, distribution, and effects of water on the landscape, under the surface, in the rocks, and in the atmosphere.
<b>Incidental take</b>	Take of any federally listed wildlife species that is incidental to, but not the purpose of, otherwise lawful activities.

<b>Interior habitat area (IHA)</b>	That portion of the older forest patch that remains effective habitat when the effects of high contrast edge are removed. Interior forest conditions are usually relatively stable compared with the changing conditions (noise, wind, sunlight, temperature, moisture) associated with the edge of a stand.
<b>Landscape</b>	An area of land containing a mosaic of habitat patches, often within which a particular “target” habitat patch is embedded. Also defined as a unit of land with separate plant communities or ecosystems forming ecological units with distinguishable structure, function, geomorphology, and disturbance regimes.
<b>Landslide</b>	The dislodging and fall of a mass of earth and rock. There are many types of landslides, including debris slides, earthflows, rock block slides, slumps, slump blocks, and slump earthflows. The different types of landslides vary tremendously in how they occur, how far they move, what type of materials move, etc.
<b>Late successional habitat</b>	A forest stand whose typical characteristics are a multi-layered, multi-species canopy dominated by large overstory trees; numerous large snags; and abundant large woody debris (such as fallen trees) on the ground. Other characteristics such as canopy closure may vary by the forest zone (lodgepole, ponderosa, mixed conifer, etc.).
<b>Layered (LYR)</b>	This stand type occurs as the process of understory reinitiation progresses where openings in the canopy persist. Shrub and herb communities are more diverse and vigorous, and two or more distinct layers of tree canopy appear.
<b>Mainline road</b>	The principal or primary logging road in a network of roads, usually permanent, and built to a higher standard than temporary roads or roads with less use.
<b>Management basin</b>	An area used for forest planning. Management basins range from 5,000 to 8,000 acres. Their boundaries are based primarily on drainage and topographic patterns within the major drainage basins and watersheds, with some adjustments to follow roads or obvious topographic features.
<b>Marbled Murrelet Management Areas (MMAs)</b>	Marbled Murrelet Management Areas are designated on a site-specific basis for occupied stands. (Sometimes called “trimas,” because of the three Ms in the acronym.)
<b>Mass wasting</b>	Processes of weathering and erosion that reduce slopes and lower land surface. May be slow (creep) or fast (a debris flow or landslide).
<b>Matrix</b>	The dominant landscape element in which patches are embedded.

<b>MBF</b>	Thousand board feet. (See Board foot.)
<b>MMBF</b>	Million board feet. (See Board foot.)
<b>Monitoring</b>	<p>The measurement of environmental characteristics and conditions over an extended period of time, in order to determine status or trends in some aspect of environmental quality.</p> <p><b>Implementation monitoring</b> — Asks the question, “Did we do what we said we would do?”</p> <p><b>Effectiveness monitoring</b> — Asks the question, “Are the management practices producing the desired results?”</p> <p><b>Validation monitoring</b> — Asks the question, “Are the planning assumptions valid, or are there better ways to meet planning goals and objectives?”</p>
<b>National Environmental Policy Act (NEPA)</b>	NEPA was adopted in 1969 and is the basic national law for the protection of the environment. The Act requires all federal agencies to consider and analyze all significant environmental impacts of any action proposed by those agencies; to inform and involve the public in the agency’s decision-making process; and to consider the environmental impacts in the agency’s decision-making process.
<b>Non-silviculturally capable</b>	See “silviculturally capable.”
<b>Northwest Oregon state forests</b>	Includes all state forestlands within the planning area for the <i>Northwest Oregon State Forests Management Plan</i> . Named state forests in the planning area include the Tillamook, Clatsop, and Santiam state forests.
<b>OFS</b>	See “older forest structure.”
<b>OHV</b>	Off-highway vehicle or all terrain vehicle (ATV). A motorized vehicle designed for or capable of travel cross-country, which is being operated off a highway. Includes 4-wheel drive vehicles, motorcycles, snowmobiles, and small vehicles traveling on 3 or more low pressure tires.
<b>Old growth</b>	A forest stand whose typical characteristics are a patchy, multi-layered, multi-species canopy dominated by large overstory trees, some with broken tops and decaying wood; numerous large snags; and abundant large woody debris (such as fallen trees) on the ground. In western Oregon, old-growth characteristics begin to appear in unmanaged forests at 175 to 250 years of age. (See <b>Late successional habitat</b> .)

<b>Older forest structure (OFS)</b>	This stand type occurs when forest stands attain structural characteristics such as numerous large trees, multi-layered canopy, substantial number of large, down logs, and large snags. It is not the same as old growth, although some of its structures are similar to old growth.
<b>ORGANON</b>	A computer model of individual tree growth developed at Oregon State University for areas of the Pacific Northwest. It will project stand development for several species mixes, stand structures and management activities.
<b>ORV</b>	Off road vehicle. See “All terrain vehicle.”
<b>OSCUR</b>	The Department of Forestry’s computerized forest inventory system, now being replaced by GIS. The acronym stands for <u>O</u> wnership, <u>S</u> ite, <u>C</u> over, land <u>U</u> se, and operation <u>R</u> atings.
<b>Owl circle</b>	Area defined for the purpose of identifying the home range of a spotted owl pair or resident single owl; circle size varies by physiographic province. In the Oregon Coast Range, the radius of an owl circle is 1.5 miles, encompassing the area of 4,766 acres. Guidelines established by the U.S. Fish and Wildlife Service (later rescinded) required protecting 70 acres of owl habitat immediately around an owl activity center, 500 acres within 0.7 miles, and 1,906 acres within 1.5 miles.
<b>Partial cut</b>	Removal of selected trees from a forest stand.
<b><i>Phellinus weirii</i></b>	A fungus that infects some species of trees, causing laminated root rot.
<b>Population</b>	The organisms that make up a particular group of a species, or that live in a particular habitat or area.  When applied to fish, under OAR 635-07-501(38): “A group of fish spawning in a particular area at a particular time which do not interbreed to any substantial degree with any other group spawning in a different area, or in the same area at a different time.” For example, “Nehalem River fall chinook salmon” are a population.
<b>Ravel</b>	Erosion caused by gravity, especially during rain, frost, and drying periods. Often seen on steep slopes immediately uphill of roads.
<b>Recreation Opportunity Spectrum (ROS)</b>	A framework for understanding and defining various settings of recreation environments, activities, and experiences. The settings are defined in terms of the opportunities to have different sorts of experiences, and range from primitive to urban. They are defined by setting indicators such as access, naturalness, facilities, and social encounters.

<b>Regeneration (REG)</b>	This stand type occurs when a disturbance such as timber harvest, fire, or wind has killed or removed most or all of the larger trees, or when brush fields are cleared for planting.
<b>Riparian area</b>	Three-dimensional zone of direct influence and/or interaction between terrestrial and aquatic ecosystems. The boundaries of the riparian area extend outward from the stream bed or lakeshore.
<b>Riparian management area (RMA)</b>	A protected area with site-specific boundaries established by the Department of Forestry; the width varies according to the stream classification or special protection needs. The purpose of the RMA is to protect the stream, aquatic resources, and the riparian area. Aquatic resources include water quality, water temperature, fish, stream structure, and other resources.
<b>Salmonid</b>	Fish species belonging to the family <i>Salmonidae</i> , especially trout and salmon species native to Oregon.
<b>SBM</b>	See “structure-based management.”
<b>Seral stages</b>	Developmental stages that succeed each other as an ecosystem changes over time; specifically, the stages of ecological succession as a forest develops.
<b>SLI</b>	See “stand level inventory.”
<b>Sidecast</b>	Road construction material that is not used for fill and is pushed to or placed on the down-slope side of the road.
<b>Silviculturally capable</b>	Designation for state forest land capable of growing forest tree species as defined by the Reforestation Suitability Standards under the Oregon Forest Practices Act.
<b>Site class</b>	Site class is a measure of an area’s relative capacity for producing timber or other vegetation. It is measured through the site index. The site index is expressed as the height of the tallest trees in a stand at an index age (King 1966). In this document, an age of 50 years is used. The 5 site classes are defined below. <ul style="list-style-type: none"> <li>Site class I — 135 feet and up</li> <li>Site class II — 115-134 feet</li> <li>Site class III — 95-114 feet</li> <li>Site class IV — 75-94 feet</li> <li>Site class V — Below 75 feet</li> </ul>
<b>Slope stability</b>	The degree to which a slope resists the downward pull of gravity. The more resistant, the more stable.

<b>Species</b>	“...any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature.” [Section 3(15) of the Endangered Species Act]
<b>Spur road</b>	A small branch of a logging road, often used for temporary access.
<b>Stand level inventory (SLI)</b>	Forest inventory developed by ODF that provides site-specific information on trees, down wood and understory vegetation on state forest lands.
<b>Stocking</b>	A measure of the adequacy of tree cover on an area in comparison to a desired amount. Unless otherwise specified, stocking includes trees of all ages. While stand density reflects the current condition of the forest, stocking indicates how acceptable this density is when compared to the desired condition (over- or understocked). Land considered understocked for one resource (e.g., timber) may be at a desirable stocking level for another (several wildlife species).
<b>Strategy</b>	In a state forest management plan, a specific action that will be taken to achieve management goals.
<b>Stream</b>	A channel that carries flowing surface water during some portion of the year, including associated ponds, side channels, and stream-associated wetlands if these features are connected to the stream by surface flow during any portion of the year. Ephemeral overland flow is not a stream since this type of flow does not have a defined channel.
<b>Stream classification</b>	Under the Oregon Forest Practices Act, streams are classified in two categories based on their beneficial use. <b>Type F</b> — Fish-bearing stream. <b>Type N</b> — Not a fish-bearing stream. <b>Perennial streams</b> — Year-round surface flow. In the Forest Practices Act, defined as a stream that normally has summer surface flow after July 15. <b>Intermittent streams</b> — Surface flow only part of the year. In the Forest Practices Act, defined as a stream that normally does not have summer surface flow after July 15. Ephemeral streams may run only during or shortly after periods of heavy rainfall or rapid snowmelt.
<b>Stream reach</b>	A section of stream that is geomorphically distinct, and that can be delineated from other adjacent sections based on channel gradient, form, or other physical parameters.

<b>Structure</b>	The various physical elements of the forest. Typical structures in a forest stand are tree sizes, gaps, layered canopy, standing dead trees (snags), fallen dead trees.
<b>Structure-based management (SBM)</b>	A silvicultural approach that produces and maintains an array of forest stand structures across the landscape. The existing forest is gradually moved toward a desired range of stand structures through active management, using sound silvicultural practices.
<b>Swiss needle cast (SNC)</b>	A native fungus that affects Douglas-fir trees. It is currently a serious concern along the coast.
<b>Take</b>	Under the federal Endangered Species Act: “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” with regard to federally listed threatened or endangered species of wildlife.

**Threatened and endangered species (T&E species)**

Federal and state agencies make formal classifications of wildlife species, according to standards set by federal and state Endangered Species Acts. The various classifications are defined below. Federal designations are made by the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS). State of Oregon designations are made by the Oregon Department of Fish and Wildlife (ODFW).

**Federal Classifications**

**Candidate species** — Those species for which the USFWS or NMFS has sufficient information on hand to support proposals to list as threatened or endangered.

**Endangered species** — A species determined to be in danger of extinction throughout all or a significant portion of its range.

**Federally listed species** — Species, including subspecies and distinct vertebrate populations, of fish, wildlife, or plants listed at 50 CFR 17.11 and 17.12 as either endangered or threatened.

**Proposed threatened or endangered species** — Species proposed by the USFWS or NMFS for listing as threatened or endangered; not a final designation.

**Threatened species** — Species likely to become endangered species throughout all or a significant portion of their range within the foreseeable future.

**State Classifications**

**Endangered species** — Any native wildlife species determined by the State Fish and Wildlife Commission to be in danger of extinction throughout any significant portion of its range within Oregon; or any native wildlife species listed as endangered by the federal ESA.

**Sensitive species** — A watchlist, developed by the Oregon Department of Fish and Wildlife, of wildlife species that are likely to become threatened or endangered throughout all or a significant portion of their range in Oregon. Subdivided into four categories: critical, vulnerable, peripheral, and undetermined status.

**Threatened species** — Any native wildlife species that the State Fish and Wildlife Commission determines is likely to become endangered within the foreseeable future throughout any significant portion of its range within Oregon.

**Understory (UDS)**

This stand type occurs after the stem exclusion process has created small openings in the canopy, when enough light and nutrients become available to allow herbs, shrubs, and new trees to grow again in the understory.

<b>Watershed</b>	In general, a watershed is defined as an area within which all water that falls as rain or snow drains to the same stream or river. There are different levels of watersheds, from the watershed of a small stream to the watershed of the Willamette River. In this document, the large watersheds of major rivers are called “drainage basins.”. The term “watershed” is used to describe the drainages of mid-sized rivers, such as the Nehalem, Siuslaw, and North Santiam.
<b>Watershed analysis</b>	A process where data is evaluated and interpreted in order to understand causal linkages between watershed-scale processes. This process informs the design and execution of management plans and activities. ODF watershed analysis projects include the watershed assessment process.
<b>Watershed assessment</b>	A systematic process for compiling and organizing data to summarize and characterize historic conditions and current conditions of a watershed.
<b>Water table</b>	The top of the groundwater. The water table is generally subsurface; marshes and lakes form where the water table meets the land surface.
<b>Wetland</b>	As defined in Oregon’s Forest Practice Rules OAR 629-24-101 (77), wetlands are “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” The process to determine the presence of wetlands will be consistent with the method described in the 1989 <i>Federal Manual for Identifying and Delineating Jurisdictional Wetlands</i> (USDI Fish and Wildlife Service et al. 1989). Common examples are marshes, swamps, and bogs, although these are not the only types of wetlands.