

Chapter 7

KEY DEFINITIONS

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Key Definitions

Basal area per acre: Basal area is the cross sectional area of a stem measured at breast height. Basal area per acre is the sum of basal areas of trees in a stand divided by the area of the stand in acres.

Biodiversity: The full range of life in all its forms (Washington Biodiversity Council).

Biodiversity pathways: An approach to achieving goals of biodiversity and conservation while also supporting revenue production in managed stands that was popularized by research biologist Andrew Carey. Biodiversity pathways consist of the following principles: retention of biological legacies at harvest (snags, downed wood, large trees, and other features) and soil organic matter; pre-commercial thinning to bypass the Competitive Exclusion stage and promote woody plant diversity; thinning at variable densities to promote heterogeneity; natural regeneration of western hemlock, western redcedar, and deciduous trees; and long rotations (70–130 years).

Board foot: The amount of wood contained in an unfinished board 1 inch thick, 12 inches long, and 12 inches wide (2.54 x 30.5 x 30.5 centimeters), abbreviated bd. ft.; commonly, 1,000 bd. ft. is written as 1 MBF and 1,000,000 bd. ft. as 1 MMBF.

Board of Natural Resources (BNR or Board): As defined and authorized in RCW 43.30.215, the BNR consists of six members: the governor or governor designee; the Superintendent of Public Instruction; the Commissioner of Public Lands; the director of the School of Environmental and Forest Sciences at the University of Washington; the Dean of the College of Agriculture, Human, and Natural Resource Sciences at Washington State University; and a representative of those counties containing state forestlands acquired by the department. The BNR's duties include establishing department policy and setting appraisal value of lands and valuable materials including timber values offered for sale. Refer to RCW 43.30.215 for more duties of BNR.

Buffer: A forested strip left during timber harvest to conserve sensitive ecosystems or wildlife habitat. Active management may be allowed as long as it is consistent with the conservation objectives for the buffer.

Commercial thinning: A thinning that generates revenue and is performed to meet a wide range of objectives, including improving the growth of the stand, enhancing stand health, reducing tree mortality, or accelerating the development of habitat.

Deferral: As used in this FEIS, the term “deferral” or “deferred lands” refers to forestland that will not be harvested during the planning period due to a long-term conservation commitment under the 1997 HCP, *Policy for Sustainable Forests*, or other DNR conservation objectives.

Discount rate: The rate used to discount future costs and revenues, such as projected costs and revenues a harvest schedule, to calculate net present value.

Dispersal management area: A discrete area to be managed for dispersal or better northern spotted owl habitat.

Dispersal habitat: A northern spotted owl habitat definition for stands with structural characteristics that allow for the movement of young spotted owls from nesting sites to new breeding sites.

Gene Pool Reserve: A naturally regenerated, Douglas-fir stand that DNR has deferred from harvest to ensure that native genetic material, well-adapted to local conditions, will be available to DNR in the future.

Genotype: The entire genetic constitution (expressed or latent) of one individual.

HCP planning unit: A geographic area that is based on watersheds for the purpose of tying the minimization and mitigation more closely to the natural systems and geographic variation in habitat, to gain economies of scale, and to provide greater efficiency in planning and implementing the HCP. The western Washington planning units are Olympic Experimental State Forest, South Coast, Columbia, Straits, North Puget, and South Puget.

Hydrologic maturity: The degree to which hydrologic processes (for example, interception, evapotranspiration, snow accumulation, snowmelt, infiltration, runoff) and outputs (for example, water yield and peak discharge) in a particular forest stand approach those expected in a late-seral stand under the same climatic and site conditions. In DNR's 1997 HCP, a hydrologically mature forest with respect to rain-on-snow runoff is a well-stocked conifer stand that is at least 25 years old.

Large data overlay: A complex GIS model composed of hundreds of individual data sources describing DNR-managed lands. Examples of such data include forest inventory information, riparian and hydrology data, roads and trails, and other biological and physical information.

LiDAR: Short for "light detection and ranging," a remote sensing technology that uses lasers to detect distant objects and determine their position, velocity, or other characteristics by analyzing reflections. It has a wide variety of uses, including measuring tree canopy heights, making topographical maps, and mapping floodplains.

Natural Area Preserve (NAP): Under authority of the state Natural Area Preserves Act of 1972 (codified in Chapter 79.70 RCW), an area established on public lands to protect the best remaining examples of many ecological communities, including rare plant and animal habitat. NAPs are managed by DNR under the Natural Areas Program.

Natural Resources Conservation Area (NRCA): As codified in 1987 in Chapter 79.71 RCW, an area designated to protect outstanding examples of native ecosystems; habitat for endangered, threatened, and sensitive plants and animals; and scenic areas. The NRCA program represents a protection alternative to complement Natural Area Preserves. NRCAs are managed by DNR under the Natural Heritage Program.

Nesting, roosting, and foraging management area: A discrete area to be managed for sub-mature or better northern spotted owl habitat and nest patches.

Nest patch: Designated 500-acre patches that include a 300 acre patch for nesting and a 200 acre buffer of sub-mature or better habitat.

Net present value: The sum of future revenues and costs discounted into current dollars.

Old growth (western Washington): DNR's *Policy for Sustainable Forests* defers old-growth stands from harvest, defined as stands, 5 acres or larger, in the most structurally complex stage of stand development, also referred to as fully functional (determined through a standard scoring method based on a scientist panel consensus). Old growth stands also refer to stands with a natural origin date prior to 1850, generally considered the start of European settlement in the Pacific Northwest.

Olympic Experimental State Forest (OESF): An HCP planning unit, about 261,000 acres of forested state trust lands on the western Olympic Peninsula in which foresters and scientists seek to intentionally learn how to integrate revenue production and ecological values in a working forest.

Plant association: A concept that recognizes different plant communities as representing distinct ecological characteristics. Plant associations are defined by the presence, absence, and relative abundance, of key plant species. The presence, absence, and relative abundance of these indicator plants are direct and composite reflections of moisture, nutrient, and climatic gradients. As such, the plant association concept provides a useful predictor for site quality, productivity, and response to disturbance, such as timber harvesting.

Peak flow: Periods of high stream flow usually associated with storm events.

Policy for Sustainable Forests: A policy document that provides broad direction for DNR, in the form of 23 policies, to effectively manage forested state trust lands. The *Policy for Sustainable Forests* was adopted by the Board of Natural Resources on July 11, 2006. The purpose of the *Policy for Sustainable Forests* is to conserve and enhance the natural systems and resources of forested trust lands managed by DNR to produce long-term, sustainable income and environmental and other benefits for the people of Washington.

Rain-on-snow zone: An elevation band in which it is common for snow pack to be partially or completely melted during rainstorms several times during the winter.

Resource management cost account: As defined in RCW 79.64.020, this is an account in the state treasury created solely for the purpose of defraying the costs and expenses necessarily incurred by the DNR in managing and administering state lands and aquatic lands and the making and administering of leases, sales, contracts, licenses, permits, easements, and rights of way as authorized under this statute. Appropriations from the resource management cost account to the DNR shall be expended for no other purposes. Funds in the resource management cost account may be appropriated or transferred by the legislature for the benefit of all of the trusts from which the funds were derived.

Riparian areas: A protected band of vegetation adjacent to wetlands, lakes, rivers, and streams that varies in width based on stream/wetland size and presumed ecological significance. The 1997 HCP designated riparian areas in order to protect salmonid and other aquatic and riparian-obligate species.

SEPA: The State Environmental Policy Act codified under Chapter 43.21C RCW.

Site class: A grouping of site indices.

Site index: A species-specific measure of actual or potential forest productivity (site quality, usually for even-aged stands), expressed in terms of the average height of trees included in a specified stand component. In the sustainable harvest calculation, site index is calculated based on the height of Douglas fir at 50 years.

Stumpage: The price of standing trees along with the right to harvest. The price does not include costs such as harvesting and transporting logs to mills. DNR sells timber at the stumpage price. In the sustainable harvest calculation, stumpage is dollars per thousand board feet.

Sub-mature habitat: A northern spotted owl habitat definition for stands with the structural characteristics necessary to provide roosting, foraging, and, rarely, nesting functions.

Timber sale: A sale of timber from DNR-managed forested state trust land that is separate from the land.

Trust: A fiduciary relationship (created by a settlor) with respect to property, in which the person who holds the title to the property (the trustee) is subject to equitable duties to keep or use the property for the benefit of another (the trust beneficiary). A trust imposes numerous enforceable provisions and places on the relationship the duty to act with utmost honesty and candor and solely in the interest of the trust beneficiaries. For the state of Washington, the Enabling Act of 1889 conveyed the intent of Congress (the settlor) to establish a trust; through this act, Congress conveyed title to land (the trust property) to the state (the trustee) for specifically identified beneficiaries (the trusts) such as, common schools, universities, and normal schools. The Legislature has further enacted that DNR is the agent that manages the trust property for the state.

Variable-density thinning: A type of commercial thinning in which a mixture of small openings (gaps), un-thinned patches (skips), and varying stand densities are created to achieve specific objectives, such as accelerating development of a complex stand structure.

Variable retention harvest: A type of regeneration or stand-replacement harvest in which elements of the existing stand, such as down wood, snags, and leave trees (trees that are not harvested), are left for incorporation into the new stand. Variable retention harvest is different from a clearcut, in which all of the existing stand is removed.