

Chapter 16

Glossary



16 GLOSSARY

abandonment (as in road or landing)	According to the California Forest Practice Rules, “abandonment means leaving a logging road reasonably impassable to standard production four wheel-drive highway vehicles, and leaving a logging road and landings in a condition which provides for long-term functioning of erosion controls with little or no continuing maintenance.”
active channel	The stream area occupied by typical flood events comparable to a 2-year recurring flood. The active channel generally coincides with the ordinary high-water mark.
activity center	A nest or spot where a single owl or a pair of owls consistently roosts during the breeding season; it can be located as a point on a map. Although, within a single year, there can be multiple roost sites in a territory, only the roost site believed to be most central to the owl’s biology (see Appendix K.5.4) will receive activity center status. Activity centers for the same owl or pair of owls can occur in different locations each year.
adaptive management	Monitoring results of management decisions in relation to changing biological and social goals and, if necessary, modifying management strategies to produce better results. Also called adaptive resource management.
adjustment area	The adjustment area encompasses the plan area as well as land adjacent to the plan area—primarily commercial timberland—from which MRC may add or delete covered lands.
age class	A distinct group of trees originating from a single natural event or regeneration activity, or a group of trees used in inventory or management, e.g., a 10-year age class.
aggradation	Deposition in one place of material eroded from another place. Aggradation raises the elevation of streambeds, floodplains, and the bottoms of other bodies of water. The process of building up a surface by deposition
aggrade	To build up a river bed and flood plain with deposited sediment.
alevin	A newly hatched salmonid with yolk sack still attached found dwelling in redds and gravels.
allochthonous	Describing an organism that originates from a place other than that in which it is found. The organism is usually a transient member of a community.
alluvial	Having originated through the transport by and deposition of running water. Found in clay, silt, sand, gravel, or similar material. Pertaining to or composed of alluvium, or deposited by running water
AMZ (aquatic management zone)	The zone along Class I, Class II, and Class III watercourses where riparian function is managed.
AMZ improvement harvests	Timber harvest within the AMZ with the intention of removing hardwood species or poorly growing conifer species to create a conifer dominated stand over the long term.
anadromous	Ascending from the sea to rivers for spawning.
anadromous fish	Fish that spawn in freshwater, migrate to the ocean or estuaries to grow and mature, and return to freshwater to reproduce. Salmon and steelhead are examples.

anuran	Any of an order Anura of amphibians comprising the frogs, toads, and tree frogs all of which lack a tail in the adult stage and have long strong hind limbs suited to leaping and swimming.
aquifer	Water-bearing stratum of permeable rock, sand, or gravel. A body of rock that is sufficiently permeable to conduct ground water and to yield economically significant quantities of water to wells and springs
assessment area	An assessment area is any location inside or outside the adjustment area that MRC evaluates for its habitat, species, sediment load, or other resources, as well as for HCP/NCCP impacts.
atyid	Shrimp of the family Atyidae.
aufwuchs	German for growth. The community of plants and animals that are attached to or move about on the surfaces of submerged stems, leaves, rocks, sticks, or debris but do not penetrate the surface.
avulsion	A sudden cutting off of land by flood, currents, or change in course of a body of water; especially one separating land from one person's property and joining it to another's.
bankfull discharge	Discharge that just fills a stream to its banks. Bankfull discharge occurs approximately every 1 to 2 years and is generally considered to be the primary channel-forming discharge.
bankfull width	The channel width at bankfull discharge. This stage is delineated by the presence of a floodplain at the elevation of incipient flooding and indicated by deposits of fine sediments such as sand or silt at the active scour mark, break in stream bank slope, and/or perennial vegetation limit (Flosi and others 1998). In the absence of a well-defined floodplain surface, other indicators are useful; in any case, parallel lines of evidence should be used (Kondolf 2003).
basal area	The area of the cross section of a tree stem, including the bark, generally at breast height (4.5 feet above the ground). As used in the HCP/NCCP, the term refers to the amount of basal area per acre, unless otherwise specified.
bedload	Sediment that is not continuously in suspension but is transported along the channel bottom in the lower layers of streamflow by rolling and bouncing. The part of the stream's load that is moved on or immediately above the stream bed, such as the larger or heavier particles (boulders, pebbles, gravel).
best management practices (BMP)	Techniques in various land use activities, such as forestry, to mitigate or prevent harm to or inhibition of natural attributes or processes.. Usually, BMPs are applied as a system of practices rather than a single practice.
biodiversity	The number and variety of organisms found within a specified geographic region, including the variability within and between species and within and between ecosystems.
biomass	Organic material, such as leaves, needles, branches, stems, and vertebrate and invertebrate animal species.
blowdown	Trees felled by high wind.
board feet	A unit of measure equaling a piece of lumber 1 in. thick, 1 ft wide, and 1 ft long, or its equivalent in dried and surfaced lumber. It is often expressed in units of thousand board feet.

bog	A hydrologically isolated, low-nutrient wetland that receives its water from precipitation only. Bogs typically have no inflow and rarely have outflows. Bogs have peat soils (except where over bedrock), and specially adapted vegetation, such as sphagnum moss, Labrador tea, bog laurel, sundews, and some sedges. Bogs may have an over-story of spruce, hemlock, cedar, or other tree species, and may be associated with open water.
bole	The trunk of a tree.
boulders	A rock mass with a diameter > 256 mm in diameter.
broadcast burning	A controlled burn, where fire is intentionally ignited in a designated area within well-defined boundaries; used to reduce of fuel hazard after logging or for site preparation before planting.
broodstock	Adult fish used for breeding in a hatchery.
brush rake	A blade with teeth at the bottom, attached to a cat or skidder and used in site preparation. It penetrates and mixes soil and tears roots.
buffer strip	A strip of land where disturbance is not allowed or is closely monitored to preserve or enhance aesthetic and other qualities along or adjacent to roads, trails, and watercourses.
buffer zone	The area of protection surrounding a nest tree in which timber operations cannot be conducted.
cable yarding	A harvest technique in which cut logs are suspended above the ground via a series of cables and transported to a landing.
CEQA	California Environmental Quality Act
canopy	The more or less continuous layer of branches and foliage formed collectively by the crowns of adjacent trees and other woody species.
canopy closure	The degree to which canopy blocks sunlight or obscures the sky. It can only be accurately determined from measurements taken under the canopy that account for the openings in the branches and crowns. MRC only measures canopy for trees taller than 30 ft—the equivalent of about 10 years of growth. This conservative approach reduces the impact of vegetation removal on hydrologic change.
carrying capacity	The maximum number of organisms that can be sustained in a given area of habitat.
catastrophic event	An infrequent, large-scale, high intensity disturbance of natural or anthropogenic causes, such as disease or pestilence, large flood events, or severe fire that would require action to protect public safety and drinking water, and prevent significant damage to natural resources.
catastrophic salvage	The removal of trees for sale from an area or areas of forest that experienced a catastrophic event.
cavity tree	Nesting, roosting, or foraging habitat for birds and mammals. Cavities are created by fire, rotting, limb breakage, and/or excavation by birds.
CDFG	California Department of Fish and Game
centroid	Center of mass; the point in a body or system of bodies at which the whole mass may be considered as concentrated.

channel	Natural or artificial waterway of perceptible extent that periodically or continuously contains moving water.
channel migration zone	Current boundaries of bankfull channel along with the portion of the floodplain that is likely to become part of the active channel in the next 50 years.
chaparral	Shrubby plants adapted to dry summers and moist winters that occur especially in southern California.
chironomids	Any of a family of midges (tiny flies) that lack piercing mouthparts.
Class I watercourse	<ol style="list-style-type: none"> 1. Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area; and/or 2. Fish always or seasonally present on-site, includes habitat to sustain fish migration and spawning.
Class II watercourse	<ol style="list-style-type: none"> 1. Fish always or seasonally present off-site within 1000 feet downstream; and/or 2. Aquatic habitat for non-fish aquatic species; 3. Excludes Class III waters that are tributary to Class I waters.
Class III watercourse	No aquatic life present, watercourse shows evidence of being capable of sediment transport to Class I and II waters under normal high water flow conditions after completion of timber operations.
Class IV watercourse	Man-made watercourses, usually downstream, established domestic, agricultural, hydroelectric supply, or other beneficial use.
clear-cut	Removal of a stand of trees in one harvest.
climax	The culminating, highly stable stage in plant succession for a given environment. An ecosystem will stay at the climax stage until disturbance affects the ecosystem and the stages of ecological succession begin again.
clinometer	A tool used by foresters to calculate percent slope, tree height, and other functions that involve trigonometry.
closed canopy	Description given to a stand of trees when the crowns of the main level of trees forming the canopy are touching and intermingled so that light cannot reach the forest floor directly.
CMZ	Channel migration zone. A channel migration zone is the area where the active channel of a stream is prone to move over time. Stream channels are dynamic features of the landscape that change position. CMZ is based on historic meander patterns.
coarse woody debris	Large pieces of wood, such as logs, pieces of logs, large branches, stumps, and snags, which add to forest biodiversity, increase forest structure complexity, and provide multiple-use habitat for many different animals
codominant tree	A tree whose crown extends above the general level of the main canopy of even-aged stands or, in uneven-aged stands, above the crowns of the tree's immediate neighbors, thereby getting full sunlight from above and comparatively little sunlight from the sides.
colluvium	Rock detritus and soil accumulated at the foot of a slope.
commercial thinning	To promote timber growth, increase average stand diameter, and improve forest health by removing trees to produce a stand with two or three distinct canopy layers.
concurrence	Agreement in an action to be taken; consent; approval.

cone rake	Device for collecting cones from a standing tree. It is lowered, usually from a helicopter, over the crown of a tree. Cones or cone-bearing branches are removed and retrieved by the machine.
confined reaches	Stream or river segments that have relatively constrained, well-defined channels, with narrow flood plains; often in mountainous areas and having a steep gradient.
connectivity	The extent to which suitable habitat patches are connected, in some cases by wildlife corridors, enabling movement of and dispersal by species.
conservation measure	A conservation measure is a specific action taken to (a) avoid or minimize take, (b) compensate for loss of habitat, or (c) provide for the conservation of covered species.
conservation strategy	A collective set of measures to avoid , minimize, or mitigate the potential take (or equivalent take) of species addressed by the HCP/NCCP, or for protecting, rehabilitating, enhancing, or restoring habitats for these species.
controllable erosion	Controllable erosion meets the following conditions: <ol style="list-style-type: none"> 1. The erosion is discharging or has the potential to discharge sediment to waters of the State of California in violation of requirements of the California Water Quality Control Board (CWQCB) or other provisions of Waste Discharge Requirements (WDRs). 2. The erosion was caused or affected by human activity. 3. The erosion may feasibly and reasonably respond to prevention and minimization by management measures.
core area	An area surrounding northern spotted owl territories based on landscape stands where habitat will not be disturbed.
core occurrence area	The core occurrence area is the portion of a CNDDDB (California Natural Diversity Database) occurrence subject to covered activities.
critical habitat	Under the federal Endangered Species Act, critical habitat is defined as specific areas <ol style="list-style-type: none"> 1. Within the geographic area occupied by a federally listed species on which are found physical and biological features essential to the conservation of the species, and that may require special management considerations or protection. 2. Outside the geographic area occupied by a listed species, when it is determined that such areas are essential for the conservation of the species.
crown cover	The degree to which the crowns of trees are nearing general contact with one another. Generally measured as the percentage of the ground surface that would be covered by a downward vertical projection of tree crown foliage.
cultivar	A variety of a plant that has been created or selected intentionally and maintained through cultivation.
culvert	Buried pipe that allows streamflow or road drainage to pass under a road.
cumulative watershed effects	Those effects that occur within and near bodies of water or significant wet areas, where individual impacts are combined to produce an effect that is greater than any of the individual impacts acting alone. Factors considered are: sediment, water temperature, organic debris, and chemical contamination.

debris flow	A moving mass of rock fragments, soil, and mud, more than half the particles of which are larger than sand size that can travel many miles down steep, confined mountain channels.
debris torrent	Debris flow or dam-break flood. Rapid movement of a large quantity of materials, including wood and sediment, down a stream channel. Usually occurs in smaller streams during storms or floods, and scours the stream bed.
decommissioning	The act of permanently closing a road or road features to control erosion and maintain water movement. Methods of decommissioning include removal of bridges, culverts, and fills.
deep-seated landslide	An area where landslide material has moved downslope either as a relatively cohesive mass (rotational slides and translational block slides) or as an irregular, hummocky mass (earthflow). The failure surface is generally deeper than 5 ft and is usually well-exposed at the head scarp.
diameter at breast height (dbh)	The diameter of a tree measured outside its bark at breast height—a point 4.5 feet above average ground level
diel	Involving a 24-hour period that usually includes a day and the adjoining night, e.g., diel fluctuations in temperature.
dispersal	The movement of juvenile, sub adult, or adult animals from one sub-population to another. Individuals may disperse for foraging, breeding, and other reasons.
distribution	The spatial arrangement of individuals of a species within its range.
dominant tree	A tree whose crown extends above the general level of the main canopy of even-aged stands or, in uneven-aged stands, above the crowns of the tree's immediate neighbors and, thereby getting full sunlight from above and partial sunlight from the sides.
downed log	Any section of the bole or of the thicker branches of a dead and downed tree.
DPS	Distinct Population Segment. A level of classification under the ESA that allows for legal protection of populations which are distinct, relatively reproductively isolated, and representative of a significant evolutionary lineage to the species.
drainage area	Watershed. Total land area draining to any point in a stream, as measured on a map, aerial photo, or other horizontal, two-dimensional projection.
early seral forest	Stage in forest development that includes seedling, sapling, and pole-sized trees.
effective shading	The percent reduction of potential solar radiation delivered to the water surface; the amount of shade, averaged to account for daily and seasonal cycles.
effectiveness monitoring	A type of monitoring that tests the effectiveness of management decisions by determining whether or not the expected results are taking place.
electrofishing	Use of electrical current to stun fish for capture and identification, or to count them for population estimates.
element	An identifiable component, process, or condition of an ecosystem.
embeddedness	Degree to which large particles (boulders, rubble, gravel) are surrounded or covered by fine sediment, usually measured in classes according to percent coverage.
emergent vegetation	Aquatic plants that are only partially submerged, and are rooted in the aquatic environment with the majority of photosynthesis occurring above the surface of the water.

endangered species	Any plant or animal species in danger of extinction in all or a significant part of its range.
Endangered Species Act (ESA)	Federal act of 1973, as amended, 16 U.S.C. Sections 1531-1543; California act of 1984, as amended, Fish and Game Codes Sections 2050-2098. (PL)
entrainment	Mobilization, by flowing water, of sediment or organic debris from the bed or banks of a stream channel.
entrenchment ratio	The ratio of floodprone width to bankfull width.
epiphytic	Characterizing a plant that grows on another plant, but is not parasitic.
equipment exclusion zone (EEZ)	The area where heavy equipment associated with timber operations is totally excluded for the protection of water quality, the beneficial uses of water, and/or other forest resources.
equipment limitation zone (ELZ)	The area where heavy equipment associated with timber operations is limited for the protection of water quality, the beneficial uses of water, and/or other forest resources.
estivation	To pass the summer in a state of torpor; summer or dry-season dormancy.
ESU	<p>Evolutionary Significant Unit. A designation of the Endangered Species Act (from NOAA Technical Memorandum NMFS F/NWC-194). A population must satisfy 2 criteria to be considered an ESU. It must</p> <ol style="list-style-type: none"> 1. Be reproductively isolated from other conspecific population units. 2. Represent an important component in the evolutionary legacy of the species. <p>Isolation does not have to be absolute, but it must be strong enough to permit evolutionarily important differences to accrue in different population units. The second criterion would be met if the population contributed substantially to the ecological/genetic diversity of the species as a whole.</p>
evapotranspiration	Loss of water from the soil both by evaporation and by transpiration from the growing plants.
even-aged forest	A forest stand comprised of trees with less than a 20-year difference in age.
existing road	Road which existed prior to a construction or maintenance operation. No alteration of the road prism is required in order to use an existing road. Pick-ups can travel on an existing road after brush and rock slides have been cleared.
existing structures	In the context of this HCP/NCCP, existing structures refers to roads, landings, skid trails, spoils piles, etc.
extinct	Disappearance of a species due to failure to reproduce in sufficient numbers to maintain succeeding generations.
extirpate	To destroy completely; wipe out.
extirpation	The elimination of a species from a particular area.
federally listed	Species formally listed as a threatened or endangered species under the federal Endangered Species Act; designations are made by the U.S. Fish and Wildlife Service or National Marine Fisheries Service.
felling	The cutting down of trees.

fen	A wetland similar to a bog, but are less acidic (pH 5-8); fens have more nutrient-rich water than bogs.
fine sediments	Sediment with particle sizes of 2 mm and less, including salt, silt, clay, and sand.
floodplain	A level, low-lying area adjacent to streams that is periodically flooded by stream water.
floodplain depth	Twice the maximum depth at bankfull conditions; used to estimate the depth at which flooding will occur at a specific location within the stream.
floodprone width	Width of the stream channel at floodprone depth.
focus species	Candidate species or species of concern.
foraging	Looking or searching for food.
forb	An herb other than grass.
Franciscan assemblage	A series of rocks from a deep ancient seabed that, according to the National Park Service, was “jumbled, altered, shoved up, and attached to the North American plate.”
freshet	A great rise or overflowing of a stream caused by heavy rains or melted snow.
fry	Life stage of trout and salmon between full absorption of the yolk sac and a somewhat arbitrarily defined fingerling or parr stage.
fuel loading	The amount of combustible material present per unit area, usually expressed in tons per acre.
full log suspension	Suspension of the entire log above the ground during yarding operations.
functional large woody debris (LWD)	Pieces of LWD that provide function for stream habitat or stream and bank stability. The minimum size is 4 in. in diameter and 10 ft in length.
fusiform	Tapering toward each end.
geographic information system (GIS)	A computer system capable of storing and manipulating spatial data and producing a variety of maps and analyses. A geographic information system has four major subsystems: data input; a data storage and retrieval; data manipulation and analysis; and data reporting.
geomorphic processes	Landscape-modifying processes, such as erosion, mass wasting, and stream flow.
gravel	Substrate particles between 2 and 64 mm in diameter.
green tree	A living and growing tree
ground truthing	Use of a ground survey to confirm the findings of an aerial survey or to calibrate quantitative aerial observations.
group selection	To establish and maintain multi-storied, uneven-aged stands of redwoods and Douglas-fir by harvesting trees in small (<2.5 acre) groups.
growth and yield model	A mathematical model used to predict forest growth and production of forest products associated with different silvicultural regimes.

gully	An erosion channel formed by concentrated surface runoff which is generally larger than 1 ft ² in cross-sectional area (1 foot deep by 1 foot wide). Gullies often form where road surface or ditch runoff flow onto unprotected slopes.
habitat conservation measures	Steps taken to protect resources (especially non-timber resources) that have been identified as sensitive in some areas from adverse effects of various management practices or land use activities. Habitat conservation measures can be applied at many levels: local mappable units, planning watersheds, management units, or projects. These measures are often incorporated into the resource capability models or policy models.
habitat conservation plan (HCP)	A plan submitted to USFWS or NMFS by an applicant seeking an incidental take permit which describes (a) the impacts that will result from taking listed species; (b) the steps the applicant will take to monitor, minimize, and mitigate such impacts; (c) the funding that will be available to implement such steps; (d) the procedures for dealing with unforeseen circumstances; (e) alternatives considered; (f) reasons alternative actions were not proposed; and (g) other measures USFWS or NMFS may require.
habitat fragmentation	The breaking up of habitat into discrete islands through modification or conversion of habitat by management activities.
harass	Defined in regulations implementing the Endangered Species Act (ESA) and promulgated by the Department of Interior as "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, and sheltering" (50 CFR 17.3). NMFS has not defined "harass" by regulation.
harm	Defined in regulations implementing the ESA and promulgated by the Department of Interior as a form of take. USFWS defines harm as an act "which actually kills or injures" listed wildlife; harm may include "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." (50 CFR 17.3). NMFS defines harm as an act "which actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding or sheltering" (50 CFR 222.102).
hauling	General term for the transportation of logs from one point to another, usually from a landing to the mill or shipping point.
headwall	Steep (generally > 50%), planar, or concave slopes at or near the heads of swales, gullies, and Class II and Class III streams.
headwall swale	A concave depression, with convergent slopes generally greater than 50%.
headwaters	The source of a stream or stream system.
heavy equipment	Any equipment that comes in contact with the ground and is ≥ 6 tons.
helicopter yarding	Use of helicopters to transport logs from where they are felled to a landing.
high retention selection	To accelerate stand development of large trees and closed canopy by harvesting individual trees and maintaining special habitat elements, such as decadent trees, snags, and downed logs.

historically active landslide	Landslide which has undergone movement within historic time (i.e., the past 100 years); features include shallow-seated and deep-seated landslides with a high likelihood of delivering sediment to a watercourse.
historically dormant landslide	Landslides which shows no evidence of movement within the past 100 years.
home range	The area used by a species and to which it exhibits fidelity.
Humboldt crossing	A Humboldt crossing consists of logs and soil placed over a stream in order to allow vehicle transport.
hydric	Requiring an abundance of moisture.
hydrology	Scientific study of the properties, distribution, and effects of water on the earth's surface, in the soil and underlying rocks, and in the atmosphere.
hypogeous	Growing underground.
implementation agreement (IA)	A part of the application for an incidental take permit, which specifies the terms and conditions, resources, schedule of activities, and expectations of the parties to the agreement.
implementation monitoring	A type of monitoring that tracks how well management policy and direction are being followed or implemented.
incidental take	The take of a threatened or endangered species that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.
incidental take permit (ITP)	A permit issued by the U. S. Fish and Wildlife Service or National Marine Fisheries Service to a non-federal entity that allows the incidental take of a threatened or endangered species; requires the permittee to carry out specified actions that minimize and mitigate the impacts of the incidental take to the maximum extent practicable, and in a manner that does not appreciably reduce the likelihood of survival or recovery of the species in the wild.
inner gorge	A geomorphic feature formed by coalescing scars that originate from landslide and erosion processes caused by active stream erosion. Inner gorge is that area of stream bank immediately adjacent to the stream channel. Its side slope is generally over 65% and occurs below the first break in slope above the active stream channel.
intermittent stream	A stream that flows intermittently based on season. Typically flows for the majority of the wet season but does not have surface flow during the dry season.
introgression	Introduction of a gene from one gene complex into another.
invasive pest plant	Plants that invade and disrupt native plant communities or that have a potential to do so. Invasive pest plants are listed by the California Department of Food and Agriculture (2004) and the California Invasive Plant Council (Cal-IPC) (formerly the California Exotic Pest Plant Council) (Cal-EPPC 1999).
inventory block	A unit of scale that contains multiple planning watersheds and typically represents a region (Albion, Navarro, Rockport etc) of the plan area. MRC uses inventory blocks in characterizing landscape conditions
jeopardy	A finding made through consultation under the Federal Endangered Species Act that the action of a federal agency would be reasonably expected, directly or indirectly, to reduce appreciably the likelihood of both survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.

keyway	A bench excavated at the toe of a fill during road building operations when it is necessary to provide a stable footing for the fill material.
land type	A basic landscape unit for which alternative management regimes are evaluated over time. A land type comprises planning watersheds, vegetation classes, site productivity, and special concern areas.
landing	An area where cut trees are gathered for transport out of the forest.
landscape stands	Areas approximately 20-40 acres in size, grouped by common features such as vegetation, harvest design, and sensitivity, such as proximity to a watercourse.
landslide	A general term for a wide variety of processes and landforms involving the downslope movement, under gravity, of soil and rock material. In forested watersheds, landsliding typically occurs when local changes in the soil pore water pressure increase to a degree that the friction between soil particles is inadequate to bind them together. (DNR)
large woody debris (LWD)	Any piece(s) of large woody debris (e.g., dead boles, limbs, and large root mass) on the ground in forest stands or in streams. For terrestrial LWD, downed logs or fallen trees greater than 16 in mean diameter and longer than 10 ft. For instream LWD, it is any piece of wood functioning for habitat development or stream channel stability in a watercourse.
late seral	The PTEIR refers to this as advanced successional.
leave tree	A tree left (i.e., not harvested) during a timber harvesting operation to provide for specific management objectives, such as wildlife structure, recruitment of future snags, seed source for natural vegetation, or minimum basal area standards.
leks	Areas where male foothill yellow-legged frogs aggregate and display to attract females.
lentic	Living in still waters, such as lakes, ponds, or swamps.
litterfall	Organic debris, mainly bark, twigs, and leaves, on the forest floor.
lobate	Resembling a lobe.
Long-Term Sustained Yield (LTSY)	Estimated timber harvest that can be maintained indefinitely once stands have been converted to a managed state under specific management intensity.
lop	Severing and spreading slash so that no part of it remains more than 30 in.
lotic	Living in actively moving water.
mainline roads	Major arteries for log transportation, generally used at least 3 out of every 5 years.
management prescription	A description of the silviculture, harvest methods, and road and landing construction or reconstruction associated with a stand. Management prescriptions are broader in scope than silvicultural prescriptions.
management unit	The part or parts of timberland ownership that are analyzed together as part of an SYP and may include areas outside the property.
marginal timberland	Lands that are forested but that have site productivity less than site class 5.
marsh	Wetlands characterized by seasonally or permanently saturated soils, often with seasonal standing water, vegetated by emergent, suffrutescent herbaceous plants. Marsh types include salt, brackish, freshwater, and alkali.

mass wasting	A general term for the down-slope movement of soil and rock material under the direct influence of gravity.
mast	Nuts or fruits of trees and shrubs that accumulate on the forest floor, providing forage for wildlife.
Mendocino Triple Junction	Area of convergence between the continental North American and oceanic Pacific and the Juan De Fuca plates
mesic	Requiring a moderate amount of moisture.
metamorphs	Frogs in the intermediate stages of metamorphosis that no longer respire via gills, and are sexually immature.
metapopulation	A population that is divided into several smaller sub-populations (often isolated in fragments of habitat).
microclimate	Climate of small areas, especially insofar as this differs significantly from the general climate of the region.
minimize	To reduce to the smallest part or proportion possible, e.g., conservation measures for rare plants might minimize impacts by avoiding a plant or by assuring that functional habitat is maintained.
mitigation measures	Modifications of actions that (1) avoid impacts by not taking a certain action or parts of an action; (2) minimize impacts by limiting the degree or magnitude of the action and its implementation; (3) rectify impacts by repairing, rehabilitating, or restoring the affected environment; (4) reduce or eliminate impacts over time by preservation and maintenance operations during the life of the action; or (5) compensate for impacts by replacing or providing substitute resources or environments.
monitoring	The evaluation of management practices in order to determine how well objectives have been met.
multi-aged stand	A forest stand that has more than one distinct age class arising from specific disturbance and regeneration events at various times. These stands will normally have multilayered structure.
multilayered canopy	Forest stands with two or more distinct tree layers in the canopy. Also called multistoried stands.
MWAT	Maximum Weekly Average Temperature
MWMT	Maximum Weekly Maximum Temperature
mycorrhizae	Fungi that have developed a symbiotic (mutually beneficial) relationship with the root systems of living plants, from garden vegetables to old growth.
natal area	Area in which an organism was born.
NCCP	Natural Community Conservation Plan. Authorized under State of California Fish and Game Code.
nesting	Activity of birds including the building of a nest, egg laying, incubation, and the raising of nestlings, i.e., young birds not yet able to fly.
nesting platform	Any large limb or other structure generally in the upper two-thirds of a tree and at least 6 in. in diameter.

NMFS	National Marine Fisheries Service, part of the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA).
nomograph	A chart relating three or more scales across which a straightedge can be placed to provide a graphical solution for a particular problem.
non-breeding	The time when an organism is not occupied with mating, reproduction, and carrying for eggs and young; often seasonal.
non-point source pollution	Pollutants detected in a concentrated water source, such as a stream, river, or lake, that come from a range of sources that cannot be isolated to one particular point.
occupied marbled murrelet site	Any area that has been traditionally occupied or used by marbled s, i.e., Lower Alder Creek Management Area.
overburden	Overburden is the earth and other material that is removed from its natural state in the process of mining.
overstory canopy	That portion of trees forming the upper canopy layer. MRC sets a minimum tree height of 30 feet for these trees.
oviposition	To lay eggs.
parr	Young salmonid, in the stage between alevin and smolt, that has developed distinctive dark parr marks on its sides and is actively feeding in freshwater.
partial harvest	Harvest in which more than 25% of the original stand remains.
pelagic	Of, relating to, or living in the open sea.
perennial surface flow	Significant flow of surface water throughout a normal water year.
periphyton	A complex matrix of algae and microbes attached to submerged substrata in almost all aquatic ecosystems. It serves as an important food source for invertebrates and some fish, and is also an important indicator of water quality.
photoperiod	Recurring cycle of light and dark periods of constant length.
piscivorous	Feeding on fish.
plan area	The land within the boundaries of the MRC property lines at the time the HCP/NCCP was submitted.
planning watershed	The contiguous land base and associated drainage system that forms a fourth-order or other watershed typically less than 10,000 acres in size.
plot	A carefully measured area laid out for experimentation or measurement.
podzolized	A process of soil formation that develops in humid regions, especially under coniferous or mixed forest, involving principally leaching of the upper layers with accumulation of organic material in lower layers.
point source pollution	Pollutants come from a specific point of discharge. For MRC, the only point source pollution is from soil erosion features, such as gullies, road crossing wash-outs, and large erosion features created by overland flow of water.
pole	A young tree, from the time its lower branches begin to die until the time the rate of crown growth begins to slow and crown expansion is noticeable.

pool	Often the deepest portion of holding water, anywhere from a few feet deep in the smallest streams to several fathoms deep in large rivers, but commonly from 5 to 20 ft deep. Every pool has three main holding areas for fish: the whitewater head, the main pool, and the tailout.
pool/riffle ratio	The ratio of surface area or length of pools to the surface area or length of riffles in a given stream reach; frequently expressed as the relative percentage of each category. Used to describe fish habitat rearing quality.
population dynamics	How populations and the environment interact to cause changes in a population.
population viability	Probability that a population will persist for a specified period across its range despite normal fluctuations in population and environmental conditions.
potentially suitable habitat	Any area that could grow into northern spotted owl foraging or nesting/roosting habitat. This would exclude rocky outcrops, pygmy forest, grasslands, etc.
pre-commercial thinning	The practice of removing some of the trees less than merchantable size from a stand so that remaining trees will grow faster.
predominant	A tree whose crown has grown above the general level of the upper canopy.
prescription	The assignment of management actions, such as harvesting, planting, thinning, erosion control, and streamside buffers... An appropriate prescription is determined by the management action in relation to vulnerability of a sensitive resource and landowner management objectives.
P-value	P is short for probability. P-value is the probability of observing the given result by chance alone in a stationary random process.
pygmy forest	Pygmy forests are unique to the Mendocino Coast, California, and are located between Navarro River and Ten-Mile River. They are characterized by highly leached, acid, nutrient poor, and year-round saturated soils. Vegetation is located on old (3 rd to 5 th) terraces with little nutrient run-off available from upslope. Trees remain mostly between 1 to 3m. Soil is usually covered with lichens, which are rare anywhere else in California. These lichens help prevent erosion.
“pygmy transition” forest	A transitional community located between pygmy forest and coast redwood-Douglas fir forest that includes Bishop pine and Douglas fir as co-dominants; understory may include some shrubs and herbs characteristic of pygmy forest. Operationally, MRC may conduct timber harvesting within “pygmy transition” forest, but not within pygmy forest.
rain-on-snow	A hydrologic event where snow-packs are partially or completely melted during rainstorms.
ranid	Any of a large family (Ranidae) of frogs distinguished by slightly dilated transverse sacral processes.

reach	<p>A length of stream channel exhibiting, on average, uniform hydraulic properties and morphology. Reaches can be divided into 3 general types (see http://www.stream.fs.fed.us/fishxing/publications/PDFs/AOP_PDFs/AppendixA.pdf):</p> <ol style="list-style-type: none"> 1. Source reaches are headwater channels which store sediment until large flow events or debris flows scour it out. 2. Transport reaches are usually steep streams that tend to resist erosion, because they have bed and bank structures dominated by boulders, gravels, wood, etc. Although these reaches store some sediment, they tend to quickly pass increases in sediment to lower-gradient reaches. 3. Response reaches are lower-gradient reaches where sediment transport is limited. When sediment supply increases from upstream transport, it generally deposits in the response reach. The reach will respond to changes in sediment supply by making adjustments, e.g., in channel size.
rearing habitat	Areas in rivers or streams where juvenile fish find food and cover in which to live and grow.
recovery plan	A plan developed by a government agency, that if implemented is expected to result in the recovery of a threatened or endangered species to the extent that the species can be de-listed from threatened or endangered status.
redd	A depression in streambed gravel dug by a spawning female salmonid as a nest for her eggs.
reforestation	The natural or artificial restocking of an area with forest trees; most commonly used in reference to artificial stocking.
refugia	Locations and habitats that support populations of organisms which are limited to small fragments of their previous geographic range.
regeneration	The seedlings and saplings existing in a stand, or the act of establishing young trees naturally or artificially.
regime	A detailed description of the sequence of harvests and other treatments that will occur in a forest stand. A regime describes the timing and details of harvests, including residual basal areas and volumes by site class. A set of regimes describe different timing options for a single silvicultural prescription. See also silvicultural system.
rehabilitation	To rehabilitate poorly stocked conifer stands experiencing excessive hardwood competition and allow for site preparation, conifer regeneration, and transition into well-stocked stands of conifers.
reserve	An area of forest land that, by law or policy, is not available for harvesting. Areas of land and water set aside for ecosystem protection, preservation of rare species, wildlife protection etc.
residual stand	The trees that remain standing after some event, such as selection cutting.
restoration	Return of an ecosystem or habitat to its original community structure, natural complement of species, and natural functions.
riffle	Fast-flowing, shallow segment of a stream where the surface of the water is broken over rocks (e.g., gravel and cobbles) or debris.
rill	An erosion channel, varying in size from a rivulet up to about 1 ft ² in cross-sectional area, that typically forms where rainfall and surface runoff is concentrated on fillslopes, cutbanks and ditches. If larger than 1 ft ² in size, the channel is called a gully.

RM	River Mile
road construction/re-construction	Any road work excluding that which requires changing the road prism.
road prism	The horizontal template of a road that includes the road surface, cutslope, fillslope, and ditch.
rootwad	Length of tree trunk, with its root mass attached, used to provide fish habitat and protection to stream banks.
RPF (registered professional forester)	A person who holds a valid license as a professional forester pursuant to Article 3, Section 2, Division 1 of the California Public Resources Code.
salmonid	Any of the family Salmonidae, e.g., salmon and trout.
saprophytic	Obtaining nourishment from the breakdown and decay of organic matter.
scarp	Steep cliff face usually formed by erosion.
screen tree	A screen tree creates a barrier of protection, e.g. from wind, for an adjacent tree and for wildlife that might be occupying it.
sediment	Fragments of rock, soil, and organic material transported and deposited in beds by wind, water, or other natural phenomena.
sediment budget	A sediment budget is an accounting of the sources and deposition of sediment as it travels from its point of origin to its eventual exit from a drainage basin (Reid and Dunne, 1996).
sedimentation	The process of deposition of sediment by mechanical means from a state of suspension in air or water
seed tree removal step	This step harvests a portion of the seed trees left in an earlier entry and after a fully stocked stand of regenerated trees has become established.
seek approval	To elicit the assent of the wildlife agencies on a course of action or on an issue related to the HCP/NCCP.
segment	MRC uses the term <i>segment</i> in 3 aquatic monitoring programs: watershed analysis, long-term channel monitoring, and focus watershed studies. A segment is typically 20-30 bankfull widths in length (roughly 300–1500 ft for most streams in the plan area). Each planning watershed will have anywhere from 3 to 30 field-observed segments, depending upon how much of the planning watershed MRC owns. The average planning watershed where MRC owns a majority of the watershed contains roughly 10–20 segments for watershed analysis and 1 long-term channel monitoring segment.
sensitive species	Those species that (1) have appeared in the Federal Register as proposed for classification and are under consideration for official listing as endangered or threatened species, (2) are on an official state list, or (3) are recognized by the U.S. Fish and Wildlife Service or other management agency as needing special management to prevent placement on federal or state lists.

serpentine-influenced communities	Communities and habitats growing in locations where the geology is composed of or the soil is derived from classes of ultramafic rocks known as serpentine, serpentinite or serpentized peridotites. The vegetation of these areas typically includes plant species that are usually or often restricted to serpentine-derived soils. Examples of serpentine-influenced communities and habitats with the potential to occur in the plan area include (but are not limited to) serpentine grassland, serpentine chaparral, serpentine woodland, and serpentine seep.
shade	Determinations of in-stream shade, or shade quality, are based on the existing temperature conditions (most recent 3-year average maximum MWAT) and the in-stream canopy conditions. See Appendix G, Protocols for Watershed Analysis, section G.2.4.
shallow landslide	Shallow landslides, also known as shallow-seated landslides, are areas where surface material (unconsolidated rock colluvium and soil) has moved downslope along a relatively steep, shallow failure surface. The failure surface is generally greater than 65% in steepness and generally less than ten ft in depth.
shelterwood removal	Removing trees in a series of two or more cuttings so new seedlings can grow from the seed of older trees.
silvicultural method	A single scheduled entry into a stand. A group of silvicultural methods make up a silvicultural system. Silvicultural methods include selection, clear-cut, commercial thin, rehabilitation, sanitation salvage, no harvest, and alternative prescriptions.
silvicultural prescription	A detailed description of the sequence of treatments that might occur in a forest stand. A prescription is one component of a silvicultural system, or the scheduled entries into a stand, including harvesting, planting, thinning, and controlling brush and other competing species.
silviculture	The science and practice of controlling the establishment, composition, and growth of the vegetation of forest stands. It includes the control of production of stand structures, such as snags and downed logs, in addition to live vegetation.
silvicultural unit	An area within a harvest plan with only 1 type of silviculture that is non-contiguous with other areas of that same type.
single tree selection	To establish and maintain multi-storied, uneven-aged stands of redwoods and Douglas-fir by harvesting individual trees more or less uniformly throughout the stand. Provides space for growth of remaining trees and space for growth of new trees.
site class	Site class reflects the potential productivity of forest stands for present and future timber species growth. Classes range from I to V. A site class of I is the most productive while a site class of V is the least productive. It is important to note that site classes are only applicable to specific regions. A site class of I in the mixed conifer region of the Sierra Nevada, for instance, is not likely to have the same growth potential as a site class of I in the north coast redwood region.
site index	A measure of forest productivity expressed as the height of the tallest trees in a stand at an index age. 50-year and 100-year bases are commonly used.
site potential tree height	The height a dominant tree may attain given its species, the site conditions where it occurs, and the time interval of growth.
site preparation	Any activity involving mechanical disturbance of soils or burning of vegetation that is performed during or after completion of timber harvesting and is associated with preparation of any portion of a logging area for artificial or natural regeneration.

site productivity	The ability of a geographic area to produce biomass, as determined by conditions (e.g., soil type and depth, rainfall, temperature) in that area.
skid trail crossing	A temporary crossing constructed for tractor logging operations that is removed following completion of logging operations, and always before the start of the winter rainy period.
skidding	Removing cut trees from an area by dragging or carrying trees on the ground with a tractor.
skid trail	A path created by dragging logs to a landing.
slash	Woody residue left on the ground after trees are felled, or accumulated there as a result of a storm, fire, or silvicultural treatment.
slope stability	The resistance of a natural or artificial slope or other inclined surface to failure by landsliding (mass movement).
snag	Any standing dead tree greater than 16 in. dbh and taller than 10 ft. A hard snag is composed primarily of sound wood, generally merchantable. A soft snag is composed primarily of wood in advanced stages of decay and deterioration, generally not merchantable.
soil pipe	A pipe-shaped void that may extend for some distance within the shallow subsurface environment as either a continuous feature or as a system of inter-connected features that form extensive, branched networks capable of transporting water and/or sediment.
source tree	A source tree is a dominant, co-dominant, or pre-dominant tree that contains large amounts of long-beard lichen in the canopy and provides propagules for dispersal.
special concern areas	Areas that contain any additional conditions that are mappable and that may affect the range of prescriptions or constrain the size of an area upon which some management activity takes place.
species of concern	Unofficial status given to a species that appears to be in jeopardy, but for which insufficient information exists to support listing.
sphagnum	Mosses of acidic, wet soils or boggy locations. About 50 species occur in North America.
spoils piles	A mound of refuse from forest operations.
springtails	Any of an order of small primitive wingless insects, usually with a forked structure on the fourth or fifth abdominal segment used for jumping.
stand	Stands are contiguous areas within the forest that have similar characteristics for vegetation (species composition and the size and density of trees), and growth potential or site quality (soil type and topographic factors, such as elevation and aspect). Stands are usually the units to which silvicultural prescriptions are applied.
stochastic	Random, uncertain; involving a random variable.
stocked	The degree to which an area of land is occupied by trees as measured by basal area or number of trees per acre.

stream order	A number from 1 to 6 or higher, ranked from headwaters to river terminus, which designates the relative position of a stream or stream segment in a drainage basin. First order streams have no discrete tributaries; the junction of two first-order streams produces a second-order stream; the junction of two second-order streams produces a third order stream.
structure class	Structure classes are a vegetation classification based on a stand's species composition, diameter distribution, and density. Structure classes relate vegetation conditions to forest wildlife species.
structural retention	Harvest practices that leave physical elements (e.g., green trees, snags, downed logs) of mature forests on site after harvest.
substrate	Mineral or organic material that forms the bed of a stream. The substance or nutrient on or in which an organism lives and grows
succession	A series of dynamic changes by which one group of organisms succeeds another through stages leading to potential natural community or climax. An example is the development of series of plant communities (called seral stages) following a major disturbance.
succession	A series of dynamic changes by which one group of organisms succeeds another through stages leading to potential natural community or climax. An example is the development of series of plant communities (called seral stages) following a major disturbance.
suffrutescent	Describes a somewhat shrubby plant stem that is slightly woody at the base.
suitable spotted owl habitat	The forest vegetation with the age class, species of trees, structure, sufficient area, and adequate food source to meet some or all of the life needs of the northern spotted owl. This excludes areas such as rocky outcrops and pygmy forest.
surface erosion	The detachment and transport of soil particles by wind, water, or gravity. Surface erosion can occur as the loss of soil in a uniform layer (sheet erosion), in many rills, or by dry ravel.
surficial	Of or relating to a surface.
suspended sediment	Sediment suspended in a fluid by the upward components of turbulent currents or by colloidal suspension.
sustained yield plan (SYP)	Document intended to supplement the THP process by providing a means for addressing long-term issues of sustained timber production and cumulative effects analysis, which includes assessing impacts on fish, wildlife, and watersheds over a large landscape.
SVL	Snout-to-Vent Length. Term used in the measurement of salamanders. This measurement does not account for lengths of tails, since fish sometimes bite them off.
swale	An unchanneled hillslope where subsurface flow is concentrated. Swales are often sites of accumulation of colluvium.
sympatry	Occupying the same range without loss of identity from interbreeding.
tadpole	Larvae (tadpoles) are frogs which respire via gills and are tied to aquatic environments.
tailout	Where the depth of the pool gradually lessens, literally the tail-end.

take	Under the federal Endangered Species Act, take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect an animal, or to attempt to engage in any such conduct.
tectonism	Structural behavior of an element of the earth's crust; crustal instability.
terrain stability unit	Categorization of a land area based on terrain similarity, mass wasting potential, and sediment delivery risk. The HCP/NCCP plan area has 8 TSUs.
territory	Area defended by a single owl or a pair of owls against members of the same species, generally during the breeding season.
thalweg	The line connecting the lowest or deepest points along the riverbed, usually identical to the center of the navigation channel. The deepest point of a stream along any channel cross-section.
timber harvesting plan (THP)	As described in Public Resources Code 4582. A three-year plan for the harvesting of commercial timberlands that (1) must be prepared by a registered professional forester, (2) must be filed with and approved by the California Department of Forestry, and (3) must contain detailed information about the land to be harvested, the silvicultural methods to be applied, special provisions (if any) to protect unique and sensitive resources in the area, the dates when timber operations will commence and conclude, and any other information that may be required by the State Board of Forestry.
timberland	Land, other than land owned by the federal government, and land designated by the California Board of Forestry as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees.
TMDL	Total Maximum Daily Load. A TMDL describes the amount of a pollutant that a watercourse can receive without violating water quality standards
tractor end-lining	Winching logs on steep ground with a crawler tractor situated on a skid road or a temporary, seasonal, or permanent road.
tractor yarding	Skidding (or transporting) logs by a self-propelled vehicle, generally by dragging the logs with a grapple or chokers.
transition	To develop an uneven-aged stand from an even-aged stand or a stand with unbalanced or irregular stocking. Involves removal of trees individually or in small groups to create a balance of different stand structure and natural reproduction.
trophic	Relating to nutrition.
turbidity	A measure of water clarity, which may be affected by material in suspension in the water.
understory	The trees and other woody species growing under the canopies of larger adjacent trees and other woody growth.
uneven-aged system	A silvicultural system that results in a multi-aged stand, containing three or more distinct age classes. The combination of actions that simultaneously maintains continuous tall forest cover, recurring regeneration of desirable species, and the orderly growth and development of trees through a range of diameter or age classes.
unique habitat elements	Important components of wildlife habitat, such as snags, large woody debris, hardwoods, streams and riparian areas, wetlands, seeps and springs, meadows, rock outcrops, cliffs, talus slopes, serpentine barrens and other areas with uncommon soil types, burrows, caves, and cavity trees.

upwelling	Upwelling is the process by which nutrients are brought up to the surface of the ocean.
vagility	Free to move about.
variable retention	To rotate stands with poorly stocked conifers and relatively high densities of hardwood. The entire stand will be harvested, with dispersed and/or aggregated retention of 10% to 40% or more of the existing stand. This will allow for vigorous growth of the remaining stand along with pockets of undisturbed trees to provide for ecological functionality, habitat structure, and forest complexity.
vegetation strata	The vegetation category, in a stratified sampling system for vegetation data, which is assigned to a stand using interpretations of aerial photos. See Appendix U, Inventory Strategy.
waterbar	Technique to divert flowing water off roads or trails in order to prevent erosion and sediment delivery to streams. Usually, a ditch or shallow gully is constructed across the road or trail at a diagonal to prevent water from flowing directly down.
watershed	A watershed is that part of a landscape that drains to a particular stream, river, or other body of water. If rain falls on saturated soil, it will run off downhill. Runoff from all the hillsides in a watershed eventually will reach the stream or river for which the watershed is named. The boundaries between watersheds are called divides and generally follow ridge crests. The biggest divide in the United States is the Great Divide, along the crest of the Rocky Mountains. The Great Divide separates waters flowing to the Atlantic Ocean from those that flow to the Pacific.
watershed analysis	A structured approach to developing a forest practices plan for a watershed analysis unit (WAU) based on a biological and physical inventory, which was originally developed by the Washington State Department of Natural Resources.
watershed analysis unit	An area of land where a watershed analysis is being or has been conducted, including, in some cases, multiple planning watersheds.
weir	Fence or enclosure set in a waterway for taking fish.
wetlands	Wetlands are transitional areas between aquatic and terrestrial habitats in which the soil is usually saturated, either on a permanent or temporary basis.
windthrow	Trees uprooted by the wind.
xeric	Characterized by, relating to, or requiring only a small amount of moisture.
yarding	Transporting logs from the point of felling to a collecting point or landing.

