

ATTACHMENT C – GLOSSARY

McKay Community Forest Stewardship Plan

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| Adaptive management | A dynamic approach to forest management in which the effects of treatments and decisions are continually monitored and used, along with research results, to modify management on a continuing basis to ensure that objectives are being met. |
| Age class | One of the intervals into which the age range of trees is divided for classification or use. |
| Anadromous fish | Fish that are born and reared in fresh water which move to the ocean and later return to fresh water to reproduce. |
| Appurtenant Road | A Logging Road under the ownership or control of the Timber Owner, Timberland Owner, Timber Operator, or plan submitter that will be used for log hauling. |
| Aspect | Direction or exposure of terrain towards which a slope faces. |
| Association | A kind of plant community with a definite species composition and structure, and relatively uniform environment (Plant Ecology). |
| Basal area | The cross-sectional area, in square feet, of a tree measured at breast height (4.5 feet). |
| Best management practice (BMP) | The method, measure or practice selected by an agency to meet its nonpoint source pollution control needs. BMPs include, but are not limited to structural controls, operations, and maintenance procedures. BMP's can be applied before, during and after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters. |
| Biological diversity | The distribution and abundance of different plant and animal communities and species over time and space. |
| Blowdown | Trees felled by high winds. |
| Board foot (BF) | A unit of measurement equal to an unfinished board one foot square by one inch thick. |
| Broadcast burn | Allowing prescribed fire to bum over a designated area for reduction of fuel hazard, or as a silvicultural treatment. |
| California Environmental Quality Act (CEQA) | Following the passage of NEPA, the California State Legislature passed an Act in 1970 to declare state policy which will ensure the long-term protection of the environment. The Act will encourage the development and maintenance of a high-quality environment now and in the future; provide the people of California with clean air and water, enjoyment of aesthetic, natural, scenic, and historic environmental qualities, and freedom from pollution; and prevent the elimination of fish or wildlife species due to man's activities. |
| Canopy | The uppermost spreading, branchy layer of a forest. |

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| Canopy closure | The progressive reduction in space between tree crowns as they spread laterally; a measure of the percent of potential open space occupied by the collective tree crowns in a stand. |
| Cavity nester | Wildlife species that excavate and/or occupy cavities in trees and snags. |
| Clearcutting | Harvesting of all trees in one area for the purpose of creating a new, even-aged stand. The area harvested may be a patch, stand or strip. |
| Codominant | One main crown class of trees with their tops in the upper canopy but lower than the dominant trees. |
| Commercial thinning | Timber sales which call for selective harvest in immature stands designed to improve the quality and growth of the remaining trees. |
| Conservation measure | A principle requiring a specific level of attainment; a rule to measure against. |
| Cover | Vegetation used by wildlife for protection from predators; to ameliorate conditions of weather; or in which to reproduce. |
| Cultural resources | Buildings, sites, areas, architecture, memorials, and objects having scientific, prehistoric, historic, or social values. |
| Cumulative effect | The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. |
| Defect | Any irregularity or imperfection in a tree, log, or wood product that reduces its soundness, durability, strength or utility. |
| Diameter at breast height (DBH) | The diameter of a standing tree measured at a point four feet-six inches from ground level on the uphill side. |
| Dispersed recreation | Outdoor recreation in which visitors are diffused over relatively large areas. Where facilities or developments are provided, they are more for access and protection of the environment than for the comfort or convenience of the people. |
| Down log | Portion of a tree that has fallen or been cut and left in the woods. |
| Ecosystem function | The manner in which organisms interact with each other and their environment. |
| Edge | Where plant communities meet or where successional stages of vegetative conditions within plant communities come together, e.g., field and woodland, forest and meadow. |

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| Effects (impacts) | Environmental consequences (the scientific and analytical basis for comparison of alternatives) as a result of a proposed action. Effects may be either direct, which are caused by action and occur at the same time and place; indirect, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable; or cumulative (see definition above). |
| Endangered species | Any plant or animal species which is in danger of extinction throughout all or a significant portion of its range (Endangered Species Act of 1973). |
| Endemic species | A species whose natural occurrence is confined to a certain region and whose distribution is relatively limited. |
| Erosion | Detachment or movement of soil or rock fragments by water, wind, ice, or gravity. Accelerated erosion is much more rapid than normal, natural or geologic erosion, primarily as a result of the influence of activities of man, animals or natural catastrophes. |
| Fire Protection Zone | That portion of the logging area within 100 ft. (30.48 m), as measured along the surface of the ground, from the edge of the traveled surface of all public roads and railroads, and 50 ft. (15.24 m) as measured along the surface of the ground from the traveled surface of all private roads, and within 100 ft. (30.48 m), as measured along the surface of the ground, from permanently located structures currently maintained for human habitation (Ref. Sec. [4562], PRC). |
| Forb | Any herbaceous plant other than grasses or grass-like plants |
| Forest Stewardship | Forest stewardship is based on conservation principles that ensure protection of all forest resources including wildlife, timber, soil, water, recreational opportunities and natural beauty. Forest stewards actively manage their land on a long-term basis by following management objectives that are based on multiple resources, are economically viable and conserve natural resources. |
| Forester | A professionally trained individual who supervises the development, care and management of forest resources to include timber, wildlife and recreation. In California foresters are licensed by the State. A Registered Professional Forester (RPF) is a person who holds a valid license as a professional forester. |
| Fragmentation | The process of reducing size and connectivity of stands that compose a forest. |
| Full log suspension | The system of transporting logs from the cutting site to the landing without touching the ground. |
| Geographic Information System (GIS) | An information processing technology to input, store, manipulate, analyze and display spatial resource data to support the decision-making processes of an organization. Generally, an electronic medium for processing map information, typically used with manual processes, to effect specific decisions about the land base and its resources. |

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| Group selection | The cutting method in which trees are removed periodically in small groups resulting in openings that do not exceed an acre or two in size. The result is an uneven-aged stand. |
| Hazard reduction | Any treatment of forest fuels that reduces the threat, ignition or spread of wildfire. |
| Hydrologic disconnection | Removal of direct routes of drainage or overland flow of road runoff to a watercourse or lake. |
| High-lead (cable) logging | Method of powered cable logging in which the main block is fastened high on a spar tree (or equivalent) to enable the front end of the logs being skidded to be lifted clear of the ground. |
| Indicator species | Species of fish, wildlife or plants which reflect ecological changes caused by land management. |
| Individual tree selection | The selection of trees for harvest based on individual tree characteristics. |
| Infiltration | The movement of water through the soil surface. |
| Inner gorge | A stream reach bounded by steep valley walls that terminate upslope into a gentler topography. |
| Intermediate (crown class) | One main crown class of trees with their tops in the middle canopy. |
| Intermediate harvest | Most commonly used intermediate cuttings are release, thinning, improvement and salvage. |
| Intermittent streams | Streams that do not contain water year-round. |
| Intolerant Trees | Trees which reproduce successfully only in the open, or where the canopy is greatly broken. |
| Landing | Any place where round timber is assembled for further transport, usually in the woods. |
| Layout | Preparation of a soft bed in order to cushion the fall of a large tree and thus prevent excessive breakage. Usually involves tractors pushing soil into a pile. |
| Litter layer | The loose, relatively decomposed organic debris on the surface of the forest floor typically made up of leaves, bark and small branches. |

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| Management indicator species | <p>Management indicator species are animals or plants selected for special attention in the Forest Plan for one or more of three reasons. These include</p> <ol style="list-style-type: none"> 1. emphasis species - species to be managed as key resources on the basis of identified issues (e.g., threatened, endangered, rare, sensitive, harvest or special interest species); 2. special habitat indicators - species that require special habitat such as snags, riparian, old-growth forest stands, etc.; 3. cumulative ecosystem change indicators - species generally having large home ranges, requiring diverse habitat. |
| Mass movement | The downslope movement of earth by gravity. Includes but not limited to landslides, rock falls, debris avalanches and soil creep. |
| Mean Annual Increment (MAI) | The average annual growth of a stand, calculated by dividing the total growth accrued over its life by its age in years at the time of measurement. |
| Monitoring | A process of collecting information to evaluate whether objectives and anticipated, or assumed results of the management plan are being realized. |
| Mortality | The loss of a population of trees, other plants and animals due to all lethal causes. |
| Multistoried | Forest stands that contain trees of various heights and diameter classes which therefore support foliage at various heights in the stand. |
| Nesting, roosting and foraging 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. |
| Net scale | The scale of a log after deduction for defect. |
| Nonpoint source pollution | Water pollution that does not result from a discharge at a specific, single location (such as a pipe) but results from land runoff and is normally associated with agricultural, silvicultural or urban runoff. |
| Objective | Objectives are more specific statements, and are measurable. They describe the actions required that lead to attaining goals. |
| Overstory | The portion of trees in a forest which forms the uppermost layer of foliage. |
| Perennial streams | Streams which normally flow throughout the year. |
| Plant associations | A plant community type based on land management potential, successional patterns and species composition. |

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| Plant community | An association of plants of various species found growing together in different areas with similar site characteristics. |
| Pre-commercial thinning | The selective felling or removal of trees in a young stand, conducted to accelerate diameter growth on remaining trees, maintain a specific stocking density and improve vigor and quality of remaining trees. Conducted at an age before the trees are commercially merchantable. |
| Prescribed fire | Intentional use of fire under predetermined weather and fuel conditions to achieve specific objectives such as rejuvenating or type-converting vegetation. |
| Quadratic Mean Diameter | Quadratic mean diameter (QMD) is a measure of central tendency which is considered more appropriate than arithmetic mean for characterizing the group of trees which have been measured. Compared to the arithmetic mean, QMD assigns greater weight to larger trees – QMD is always greater than or equal to arithmetic mean for a given set of trees. |
| Reach | A continuous unbroken stretch of a stream with homogeneous characteristics; an extremity of a stream; a specified portion of a stream. |
| Recruitment | Replenishment. In terms of wildlife biology, to achieve successful reproduction or to replenish a supply of habitat elements, such as snags or down logs. |
| Reforestation | The natural or artificial restocking of an area with forest trees; includes measures to obtain natural regeneration, as well as tree planting and seeding. |
| Regeneration | The renewal of a tree crop, whether by natural or artificial means. Also, the young tree crop (seedlings and saplings) itself. |
| Release | All work done to free desirable trees from competition with other, less desirable vegetation. |
| Resilience | The ability of a social or ecological system to absorb disturbances, while retaining the same basic structure and ways of functioning, the capacity for self-organization, and the capacity to adapt to stress and change. |
| Restoration | Restoration is an intentional activity that initiates or accelerates the recovery of an ecosystem with respect to its health, integrity and sustainability. |
| Right-of-way | An accurately located land area within which a user may conduct operations approved by or granted by the landowner. |

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| Riparian areas | Terrestrial areas where the vegetation and microclimate are influenced by perennial and/or intermittent water, associated high water tables and soils which exhibit some wetness characteristics; this habitat is transitional between true bottom land wetlands and upland terrestrial habitats and, while associated with water courses, may extend inland for considerable distance. |
| Rotation | The planned number of years required to establish and grow timber to a specified condition or maturity for regeneration harvest (including the regeneration period). |
| Salmonid | Member of the fish family Salmonidae, includes salmon and trout. |
| Salvage | Removal of recently dead or dying trees to minimize the loss of wood products. |
| Seasonal road | A Logging Road that is part of the permanent road network that is not designed for year-round use. |
| Second growth (young growth) | Timber stands established after natural or human-caused removal of the original stand or previous forest growth. |
| Sediment | Solid material, both mineral and organic, that is suspended in, or being transported by water. |
| Sediment yield | The quantity of soil, rock particles, organic matter or other dissolved or suspended debris that is transported through a cross-section of stream in a given period. |
| Seeps | Places where water oozes from the ground. |
| Selection cutting | The annual or periodic removal of trees, individually or in small groups, from an uneven-aged forest in order to realize yield and establish a new stand of irregular constitution. |
| Sensitive species | Those species that are under consideration for official listing as endangered or threatened species; or are on an official state list as needing special management attention. |
| Seral stage | A transitory or developmental stage of a biotic community in an ecological succession (does not include climax successional stage). |
| Shaded Fuel break | A shaded fuel break is a forest management strategy used for mitigating the threat of wildfire in areas where natural fire regimes have been suppressed, leading to a dangerous buildup of combustible vegetation. Constructing a shaded fuel break is the process of selectively thinning and removing more flammable understory vegetation while leaving the majority of larger, more fire tolerant tree species in place. |

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| Silvicultural system | A management process whereby forests are tended, harvested and replaced resulting in a forest of distinctive form. Systems are classified according to the method of carrying out the methods that remove the mature trees and provide for regeneration; and to the type of forest thereby produced. |
| Silviculture | The art and science of growing and tending forest vegetation, i.e., controlling the establishment, composition and growth of forests for specific management goals. |
| Site | Productive capacity of an area to produce forests or other vegetation. Related to climatic, biotic and soil factors for forest crops. It is expressed by a site index based on height of dominant trees in a stand at a certain age. Site indices are sometimes grouped into site classes. |
| Site preparation | Removal of unwanted vegetation, slash, roots and stones from a site before reforestation. |
| Skid | To remove a severed tree from its stump to a collection point where it is loaded onto another vehicle. |
| Slash | The residue of trees left on the ground after timber cutting or after other disruptions such storms or fires. Slash includes unutilized logs, uprooted stumps, broken stems, branches, twigs, leaves, bark and chips. |
| Slope stability | The resistance of a natural or artificial slope surface to failure by land sliding (mass movement). |
| Snag | A standing dead tree. |
| Soil compaction | An increase in bulk density (weight per unit volume) and a decrease in soil porosity resulting from applied loads or pressure. |
| Soil productivity | Capacity or suitability of a soil for establishment and growth of a specified crop or plant species, primarily through nutrient availability. |
| Soil series | A group of soils developed from a particular type of parent material having naturally developed horizons that are similar in characteristics and arrangement in the soil profile. |
| Spatial | Referring to the distance, interval, or area between or within things. |
| Species diversity | The distribution and abundance of different plant and animal communities and species. |
| Stand | A geographically identifiable group of trees sufficiently uniform in age-class distribution, composition and structure to be a distinguishable unit. |
| Steelhead | A large-sized, silvery anadromous rainbow trout. |

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| Stocking | The degree to which trees occupy the land, measured by basal area and/or number of trees by size and spacing; compared with a stocking standard, that is, the basal area and/or number of trees required to fully utilize the land's growth potential. |
| Stream class | <p>The classification of streams according to their beneficial uses. Whole streams or parts of streams can be classified. One stream may be divided into several classes.</p> <p>Class I. Perennial or intermittent streams have one or more the following characteristics: (1) is the direct source of water for domestic use (cities, recreation sites, etc.); (2) are used by large numbers of fish for spawning, rearing or migration; (3) have sufficient flow to have a major influence on the water quality of a Class I stream.</p> <p>Class II. Perennial or intermittent streams have one or both of the following characteristics: (1) are used by non-fish aquatic species (e.g., salamanders, benthic insects, etc.); (2) have sufficient flow to have a moderate influence on downstream quality of a Class I or II stream.</p> <p>Class III. Intermittent streams not meeting Class I or Class II definitions</p> <p>Class IV. All man-made watercourses such as inboard ditches or those not meeting Class I, II or III definitions.</p> |
| Stratum | A grouping of similar stands defined for silvicultural or management purposes according to similarities in stand composition, structure and age. Plural is strata. |
| Structure | The various horizontal and vertical physical elements of the forest. |
| Stumpage | Selling of timber based upon the log buyer paying for the timber “at the stump” whereby logging and hauling costs are borne by the purchaser as opposed to a delivered log type of timber sale where timber is paid for delivered to the sawmill. |
| Successional stage | A phase in the gradual changing of a biological community (same as seral stage). |
| 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 rills, or by dry ravel. |
| Suspended sediment | Sediment suspended in a fluid by the upward components of turbulent currents or by colloidal suspension. |
| Sustained yield | The yield that a forest can produce continuously at a given intensity of management. |
| Terrestrial | Living on land; distinguished from aquatic (living in water). |

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| Tethered Operations | Tractor Operations which utilize synchronized cable winch systems which have been specifically designed or modified by the manufacturer or a Professional Engineer, as described within the Professional Engineers Act (Chapter 7 of Division 3 of the Business and Professions Code), to assist equipment in felling or Yarding during Timber Operations. |
| Threatened species | Any species of plant or animal which is likely to become endangered in the foreseeable future throughout all, or a significant portion of its range. |
| Timber site index | A measure of site productivity based on the maximum rate of tree height growth. It is normally expressed as the height in feet reached by a tree at a given, or base age (the site index). |
| Timber stand improvement (TSI) | Measures such as thinning, pruning, release cutting, prescribed fire, girdling, weeding, etc., of unwanted trees with the objective of improving growing conditions of the remaining trees. |
| Tolerance | The forestry term for expressing the relative capacity of a tree to compete under low light and high root competition. |
| Tolerant Trees | Trees which reproduce and form understories beneath canopies of less tolerant trees or even beneath shade of their own species. |
| Tonne | Metric ton. One metric ton (tonne) of carbon equals 3.67 metric tons of carbon dioxide equivalent (CO ₂ e). |
| Tractor Operations | Any activity which is associated with Timber Operations and is performed by wheel or track mounted ground-based equipment, including, but not limited to, tractors or skidders. |
| Turbidity | The optical property of water as affected by suspension of material such as sediment, i.e., the muddy or cloudy state of water. |
| U.S Fish and Wildlife Service | A division within the U.S. Department of the Interior. |
| Underburning | Prescribed burning of the forest floor for botanical, wildlife habitat, fire hazard reduction or silvicultural objectives. |
| Understory | Vegetation growing under the canopy formed by taller trees (trees or shrubs). |
| Uneven-aged Management | The application of a combination of actions needed to simultaneously maintain continuous high-forest cover, recurring regeneration of desirable species, and orderly growth and development of trees through a range of diameter or age classes to provide a sustained yield of forest products. Cutting is usually regulated by specifying the proportion of trees of particular sizes to be retained in each area, thereby maintaining a planned distribution of size classes. Cutting methods that develop and maintain uneven-aged stands include single-tree and group selection. |

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| Vertical Diversity | The diversity in a stand that results from the complexity of the aboveground structure of the vegetation. |
| Viewshed | A total landscape seen or potentially seen from specific points on a logical part of a travel route or water body. |
| Watershed | The land area drained by a river system. |
| Wetlands | Areas that are inundated by surface or ground water with a frequency sufficient to support, and that, under normal circumstances do or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, wet meadows, river overflows, mud flats and natural ponds. |
| Wildland-urban interface | Any area where man-made improvements are built close to, or within, natural terrain and flammable vegetation, and where high potential for wildland fire exists. |
| Wildlife tree | A snag or a live tree designated for wildlife habitat. |
| Windfall Yarding | Trees or parts of trees felled by high winds (see blowdown). |
| Yarding | The movement of forest products from the point of felling to a landing. |
| Yield table | A table showing the progressive change in a stand's development at periodic intervals covering the range of age of a species on given sites. It may include information on average diameter and height, basal area, number of trees, volumes of thinning and final cuts, and other essential data. |
| Yield tax | A tax levied on timber at the time it is harvested. It is based on stumpage (log value minus logging costs) value from Board of Equalization published quarterly reports. |