

APPENDIX D – GLOSSARY

A

Active management: Management approach in which humans actively manipulate ecosystems through timber harvesting and thinning to improve forest health and to reduce fire hazard.

Allowable sale quantity (ASQ): The quantity of timber that may be sold from an area covered by a land management plan during a period specified by the plan, usually expressed as the average annual allowable sale quantity.

B

Basal area: The cross-sectional area of all stems of a species or all stems in a stand measured at breast height (4.5 ft. or 1.37 m. above the ground) and expressed per unit area of land (e.g., 25 sq. ft. per acre).

Best management practices (BMPs): A practice or usually a combination of practices that are determined by a State or a designated planning agency to be the most effective and practicable means (including technological, economic, and institutional considerations) of controlling point and nonpoint source pollutants at levels compatible with environmental quality goals.

Brush: A collective term that refers to stands of vegetation dominated by shrubby, woody plants, or low growing trees, usually of a type undesirable for livestock or timber management.

C

Chain: A unit of linear measurement equal to 66 feet.

Class I air quality areas: National Forest System Wilderness areas, national parks, or national wildlife refuges greater than 5,000 acres in size, designated prior to the establishment of the Clean Air Act Amendments of 1977. Class I areas can also include lands designated by Tribes or States. These areas serve as benchmarks for monitoring changes in air quality over adjacent lands.

Clearcutting: Cutting essentially all trees in a given area, which produces a fully exposed microclimate for the development of a new age class. Regeneration can be from natural seeding, direct seeding, planted seedlings, or advance reproduction. See even-aged management.

Commercial timber harvest: The removal of merchantable trees, portions of trees, and timber products from the National Forest System lands.

Commodity-purpose timber sale/harvest: A component of the Forest Service timber sale program that includes timber sales made primarily to supply timber in response to society's demand for wood.

Condition Class 1: Low risk from uncharacteristic wildfire effects – Fire regimes within this class are within the historical range of variability for fire frequency and intensity.

Condition Class 2: Moderate risk from uncharacteristic wildfire effects – Fire regimes are beginning to be altered since one or more wildfires have been suppressed allowing for forests to become noticeably denser especially with younger sapling trees.

Condition Class 3: High risk from uncharacteristic wildfire effects – The fire regimes in this condition class are significantly altered, having missed many natural fires. Forests that were once open and park-like are now densely stocked.

Creeping fire: Fire burning with a low flame and spreading slowly.

D

DBH: Diameter of the tree at breast height.

Dead fuels: Fuels with no living tissue in which moisture content is governed almost entirely by atmospheric moisture (relative humidity and precipitation), dry-bulb temperature, and solar radiation.

Designated road, trail, or area: A National Forest System road, a National Forest System trail, or an area on National Forest System lands that is designated for motor vehicle use pursuant to § 212.51 on a motor vehicle use map.

Developed recreation: Activities that are consistent with the settings and experiences identified with the Roaded Natural (RN), Rural (R), and Urban (U) classes of the Recreation Opportunity Spectrum. These activities are usually associated with an area that has been improved or developed for recreation, such as campgrounds and picnic areas, scenic overlooks and interpretive sites, or visitor centers and resorts.

Dispersed recreation: Activities usually associated with backcountry and trails and are consistent with the settings and experiences identified with Primitive (P), Semi-Primitive Non-Motorized (SPNM), and Semi-Primitive Motorized (SPM) classes of the Recreation Opportunity Spectrum. Examples of these activities include hiking, snowmobiling, mountain biking, wilderness use, backpacking, horseback riding, and OHV use.

Disturbance: A natural or human event that causes a change in the existing condition of an ecological system.

E

Ecosystem: An arrangement of organisms defined by the interactions and processes that occur between them. Ecosystems are often defined by their composition, function, and structure.

Endangered species: A plant or animal species listed under the Endangered Species act that is in danger of extinction throughout all or a significant portion of its range.

Ephemeral stream: A stream lasting a very short time; short-lived.

Even-aged (silvicultural) management: The methods used to regenerate and maintain a stand with a single age class.

F

Fire behavior: The manner in which a fire reacts to the influences of fuel, weather and topography.

Fire frequency: How often fires occur within a given time period in a specified area.

Fire intensity: The rate at which fuel is consumed and heat is generated.

Fire load: The number and size of fires historically experienced on a specified unit over a specified period (usually one day) at a specified index of fire danger.

Fire perimeter: The entire outer edge or boundary of a fire.

Fire regime: The fire pattern across the landscape, characterized by occurrence, interval, and relative intensity. Fire regimes result from a unique combination of climate and vegetation and exist on a continuum from short-interval, low-intensity fires to long-interval, high-intensity fires.

Fire return interval: The average number of years between successive fires in a designated area.

Fire severity: Denotes the scale at which vegetation and a site are altered or disrupted by fire, from low to high. It is a combination of the degree of fire effects on vegetation and on soil properties.

Floodplain: A naturally flat plain along the course of a stream or river that is naturally subject to flooding.

Forb: A plant with a soft, rather than permanent woody stem, that is not a grass or grass-like plant.

Forest road or trail: A road or trail wholly or partly within or adjacent to and serving the National Forest System that the Forest Service determines is necessary for the protection, administration, and utilization of the National Forest System and the use and development of its resources.

Forest transportation atlas: A display of the system of roads, trails, and airfields of an administrative unit.

Forest transportation facility: A forest road or trail or an airfield that is displayed in a forest transportation atlas, including bridges, culverts, parking lots, marine access facilities, safety devices, and other improvements appurtenant to the forest transportation system.

Forest transportation system: The system of National Forest System roads, National Forest System trails, and airfields on National Forest System lands.

Fuels: Living and dead parts of trees and shrubs, organic material and surface material that can readily burn in a wildfire.

1 Hour Fuels: 0 -0.25" in size. The internal moisture content of these fuels will change within one hour after a change in surrounding air moisture (relative humidity).

10 Hour Fuels: 0.25 – 1" in size. The internal moisture content of these fuels will change ten hours after a change in surrounding air moisture.

100 Hour Fuels: 1 – 3" in size. The internal moisture content of these fuels will change one hundred hours after a change in surrounding air moisture.

Fuel loading: The amount of fuel present expressed quantitatively in terms of weight of fuel per unit area.

Fuel model: Simulated fuel complex (or combination of vegetation types) for which all fuel descriptors required for the solution of a mathematical rate of spread model have been specified.

Fuel moisture (fuel moisture content): The quantity of moisture in fuel expressed as a percentage of the weight when thoroughly dried at 212 degrees Fahrenheit.

Fuel reduction: Manipulation, including combustion, or removal of fuels to reduce the likelihood of ignition and/or to lessen potential damage and resistance to control.

Fuel type: An identifiable association of fuel elements of a distinctive plant species, form, size, arrangement, or other characteristics that will cause a predictable rate of fire spread or difficulty of control under specified weather conditions.

Fuels treatment: The rearrangement or disposal of fuels to reduce fire hazard or to accomplish other resource management objectives.

G

Ground-based logging: The dragging or carrying of trees or logs for the stump to the landing using various types of self-propelled machines (e.g., tractors, skidders, forwarders).

Ground fuel: All combustible materials below the surface litter, including duff, tree or shrub roots, punchy wood, peat, and sawdust, that normally support a glowing combustion without flame.

Group selection: An uneven-aged cutting method in which small groups of trees, usually no more than two acres in size, are removed to meet a predetermined goal of size distribution and tree species in the remaining stand.

H

Hazard reduction: Any treatment of a hazard that reduces the threat of ignition and fire intensity or rate of spread.

Historic range of variability: The fluctuations of composition, structure, and function within stable ecosystems over time.

I

IMPLAN (Impact Analysis for Planning): The input-output model used by the USDA Forest Service to estimate economic effects by tracing the interrelationships between producers and consumers in an economy as measured by jobs and income

Inholding: A parcel of land in other ownership (State, private, other Federal agency) surrounded by National Forest System land.

Intermittent stream: A stream that stops or ceases for a time; alternately stopping and beginning.

L

Landing: Any place where logs are laid after being yarded, awaiting subsequent handling, loading, and hauling.

Landscape: An area of interacting and interconnected patterns of habitats (ecosystems) that are repeated because of the geology, landform, soil, climate, biota, and human influences throughout the area. A landscape is composed of watersheds and smaller ecosystems.

Litter: Top layer of the forest, scrubland, or grassland floor, directly above the fermentation layer, composed of loose debris of dead sticks, branches, twigs, and recently fallen leaves or needles, little altered in structure by decomposition.

Live fuels: Living plants, such as trees, grasses, and shrubs, in which the seasonal moisture content cycle is controlled largely by internal physiological mechanisms, rather than by external weather influences.

M

Management direction: A statement of multiple-use and other goals and objectives, the associated management prescriptions, and standards and guidelines for attaining them.

Management indicator species: Species used to monitor the effects of management activities on viable populations of groups of similar species with the same or similar habitat requirements.

Management prescription: Management practices and intensity (frequency and duration) selected and scheduled for application on a specific area to attain multiple-use and other goals and objectives.

Mechanical pre-treatment: Preparing a forest or shrubland for prescribed burning by using machinery such as bulldozers and rubber tire skidders to create a fuel bed where a prescribed fire can be ignited without undue risk of the fire escaping or killing the dominant trees on the site.

Mechanized falling: Falling of standing timber by a self-propelled mobile wheeled or tracked machine equipped with a shear or other powered cutting device.

Mineral soil: Soil layers below the predominantly organic horizons; soil with little combustible material.

Motor vehicle: Any vehicle which is self-propelled, other than: (1) A vehicle operated on rails; and (2) Any wheelchair or mobility device, including one that is batterypowered, that is designed solely for use by a mobility-impaired person for locomotion, and that is suitable for use in an indoor pedestrian area.

Motor vehicle use map: A map reflecting designated roads, trails, and areas on an administrative unit or a Ranger District of the National Forest System.

Mosaic: A pattern of vegetation in which two or more kinds of communities are interspersed in patches, such as clumps of shrubs with grassland between.

N

National Environmental Policy Act (NEPA): NEPA is the basic national law for protection of the environment, passed by Congress in 1969. It sets policy and procedures for environmental protection, and authorizes Environmental Impact Statements and Environmental Assessments to be used as analytical tools to help federal managers make decisions.

National Forest System road: A forest road other than a road which has been authorized by a legally documented right-of-way held by a State, county, or other local public road authority.

National Forest System trail: A forest trail other than a trail which has been authorized by a legally documented right-of-way held by a State, county, or other local public road authority.

Nonnative invasive species: Plant species that are introduced into an area in which they did not evolve, and in which they usually have few or no natural enemies to limit their reproduction and spread. These species can cause environmental harm by significantly changing ecosystem composition, structure, or processes, and can cause economic harm or harm to human health.

Noxious weeds: Plant species designated as noxious weeds by the Secretary of Agriculture or by the responsible State official. These species are generally aggressive, difficult to manage, poisonous, toxic, parasitic, a carrier or host of serious insects or disease, and are nonnative, new, or uncommon to the United States.

O

Off-highway vehicle: Any motor vehicle designed for or capable of crosscountry travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain.

Over-snow vehicle: A motor vehicle that is designed for use over snow and that runs on a track or tracks and/or a ski or skis, while in use over snow.

P

Partial cutting: Removal of part of a stand of trees for purposes other than regenerating a new age class. Partial cutting is not a regeneration method.

Perennial stream: A stream lasting or continuing through the entire year.

Pre-commercial thinning: The removal of trees not for immediate financial return but to reduce stocking, to concentrate growth on the more desirable trees, or to accomplish some other resource objective such as fuel reduction.

Prescribed burning: The fire management technique of purposely igniting a fire in a vegetated ecosystem to restore forest health and to reduce fire hazard.

Prescribed fire: Any fire ignited by management actions under certain, predetermined conditions to meet specific objectives related to hazardous fuels or habitat improvement. A written, approved prescribed fire plan must exist, and NEPA requirements must be met, prior to ignition.

Prescription: A written statement defining goals and objectives and the actions or treatments needed to attain the goals and objectives. Measurable criteria that define conditions under which a prescribed fire may be ignited, guide selection of appropriate management responses, and indicate other required actions. Prescription criteria may include safety, economic, public health, environmental, geographic, administrative, social, or legal considerations. Prescriptions are written for discrete portions of National Forest System lands. A prescription can be resource specific (such as for prescribed fire or silviculture) or, in the case of management prescriptions, broad to attain multiple use goals and objectives.

Proposed species: Any species that is proposed by the Fish and Wildlife Service or the National Marine Fisheries Service to be listed as threatened or endangered under the Endangered Species Act.

R

Regeneration method: A cutting procedure that results in a new age class of trees. Methods include clearcutting, seed tree, shelterwood, selection, and coppice.

Riparian: Situated or dwelling on the bank of a river or other body of water.

Road: A motor vehicle route over 50 inches wide, unless identified and managed as a trail.

Road construction or reconstruction: Supervising, inspecting, actual building, and incurrence of all costs incidental to the construction or reconstruction of a road.

Roaded Natural (RN): A definition used in the Recreation Opportunity Spectrum (ROS) to characterize an area that has predominantly natural-appearing environments with moderate evidences of the sights and sounds of humans. Such evidences are usually in harmony with the natural environment. Interaction between users may be low to moderate, but evidence of other users is prevalent. Resource modification and practices are evident but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and facilities design.

S

Salvage: An intermediate cutting made to remove trees that are dead or in imminent danger of being killed by injurious agents.

Sanitation: An intermediate cutting made to remove dead, damaged or susceptible trees to prevent the spread of pests or pathogens.

Scheduled timber harvest: The quantity of timber planned for sale during a specified time period from the area of suitable land covered by a land management plan. Scheduled timber harvest accomplishes the allowable sale quantity.

Sediment (sedimentation): Solid materials, both mineral and organic, in suspension or transported by water, gravity, ice, or air; may be moved and deposited away from their original position and eventually will settle to the bottom.

Seed tree cutting: The cutting of all trees except for a small number of widely dispersed trees retained for seed production and to produce a new age class in a fully exposed microenvironment. Seed trees may or may not be removed after regeneration becomes established.

Selective cutting: A cutting method that removes only a portion of trees in a stand.

Semi-Primitive Motorized (SPM): A definition used in the Recreation Opportunity Spectrum (ROS) to characterize an area that has a predominantly natural or natural-appearing environment of moderate to large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is permitted.

Sensitive species: Those plant and animal species identified by a Regional Forester for which population viability is a concern, as evidenced by significant current or predicted downward trends in population numbers or density, or by significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution.

Shelterwood cutting: The removal of most trees, leaving those needed for sufficient shade to produce a new age class in a moderated microenvironment. Removal of the shelter trees may or may not occur after regeneration becomes established.

Single-tree selection: Individual trees of all size classes are removed, as uniformly as possible, throughout the stand to promote the growth of remaining trees and to provide space for regeneration.

Skid road (skid trail): An access cut through the woods for skidding.

Skidder: A self-propelled machine (cable, clam-bunk, or grapple) used for dragging trees or logs.

Slash: Debris left after logging, pruning, thinning or brush cutting; includes logs, chips, bark, branches, stumps and broken understory trees or brush.

Snag: A standing dead tree or part of a dead tree from which at least the smaller branches have fallen.

Stand: A distinguishable, contiguous group of similar plants or trees that are uniform in age-class distribution, composition, and structure, and are growing on a site of uniform quality.

Stewardship: Administration of land and associated resources in a manner that enables them to be passed on to future generations in a healthy condition.

Stewardship-purpose timber sales or harvest: A component of the Forest Service timber sale program that includes timber sales made primarily to help achieve desired ecological conditions or to attain some non-timber resource objective requiring manipulation of the existing vegetation.

Structure: The sizes, shapes, and/or ages of the plants and animals in an area.

Succession: A predictable process of changes in structure and composition of plant and animal communities over time. Conditions of the prior plant communities or successional stage create conditions

that are favorable for the establishment of the next stage. The different stages of succession are often referred to as seral stages.

Surface fuels: Loose surface litter on the soil surface, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches that have not yet decayed enough to lose their identity; also grasses, forbs, low and medium shrubs, tree seedlings, heavier branchwood, downed logs, and stumps interspersed with or partially replacing the litter.

T

Temporary road or trail: road or trail necessary for emergency operations or authorized by contract, permit, lease, or other written authorization that is not a forest road or trail and that is not included in a forest transportation atlas.

Thinning: (a) The cutting down and/or removing of trees from a forest to lessen the chance of a ground fire becoming a crown fire; a method of preparing an area so that a prescribed fire can be more easily controlled. Thinning influences the available amount of fuel and fuel arrangement, and it can indirectly affect fuel moisture content and surface wind speeds. (b) A culture treatment made to reduce stand density of trees primarily to improve growth, enhance forest health, or recover potential mortality.

Threatened species: Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range and which the appropriate Secretary has designated as a threatened species.

Timberland (commercial forest land): Land suitable for producing timber crops and not withdrawn from timber production by statute or administrative regulation. The typical minimum level of productivity is 20 cubic feet per acre per year.

Timber harvest: The volume of trees with commercial value that are cut and removed from the forest. Most of this volume was sold in prior fiscal years, as the contract life of most timber sales is 2 to 3 years. Volume harvest in a given year can be more or less than volume offered or volume sold, depending on market conditions (which can cause purchasers to adjust their harvest schedule), volume of timber sold in the previous few years, and other unforeseen situations such as severe fire seasons that limit operating time because of fire danger.

Timber offered: The volume of timber advertised for sale. The volume offered depends on forest estimates of capability (with allowable sale quantity as a ceiling), budget constraints, and success in completing stages of the timber sale preparation process.

Timber sale: A contractual process of selling timber to a purchaser and implementing a series of harvesting requirements for how, when, and what type of trees will be removed.

Timber sold: The timber volume sold and under contract with a purchaser. Volume sold in a given year is usually less than volume offered because some sales offered receive no bids and are not sold.

Total Maximum Daily Load (TMDL): A calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources.

Trail: A route 50 inches or less in width or a route over 50 inches wide that is identified and managed as a trail.

Travel management atlas: An atlas that consists of a forest transportation atlas and a motor vehicle use map or maps.

U

Unauthorized road or trail: A road or trail that is not a forest road or trail or a temporary road or trail and that is not included in a forest transportation atlas.

Uneven-aged (silvicultural) management: Methods used to regenerate and maintain a multi-aged structure by removing some trees in all size classes, either singly, in small groups, or in strips.

V

Viability: The ability of a population of a plant or animal species to persist for some specified time into the future. Viable populations are populations that are regarded as having the estimated numbers and distribution of reproductive individuals to ensure that its continued existence is well distributed in a given area.

Volume sold: The amount of timber actually purchased, which is usually less than offered volume because some sales are judged as economically marginal by prospective purchasers, and they receive no bids.

Volume harvested: The actual volume removed from the forest in a given year, which may be higher or lower than volume sold depending on market conditions. Most harvest volume was actually sold 1 to 3 years earlier.

W

Wildland: Land other than that dedicated for other uses such as agriculture, urban, mining, or parks.

Wildland fire: Any nonstructure fire, other than prescribed fire, that occurs in the wildland. A lightning- or human-caused fire can be suppressed or, if lightning-caused, allowed to burn. Often used synonymously with ‘wildfire’ or ‘forest fire’.

Wildland-urban interface: The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. Because of their location, these structures are extremely vulnerable to fire should an ignition occur in the surrounding area.

Y

Yarder: A machine for cable logging consisting of a system of power-operated winches and a tower used to haul logs from a stump to a landing.