

Chapter 7 Glossary



Trail shelter covered in snow

7.1 GLOSSARY

Abbreviations and Acronyms

AA	Analysis Area	GPS	Geographic Positioning System
AASHTO	American Association of State Highway and Transportation Officials	I&E	Information and Education
ADA	Americans with Disabilities Act	IDT	Interdisciplinary Team
AMP	Acceptable Management Practice	LAC	Limits of Acceptable Change
AMS	Analysis of the Management Situation	LNT	Leave No Trace
APE	Area of Potential Effects	LRMP	Land and Resource Management Plan ("Forest Plan")
ASQ	Allowable Sale Quantity	LT	Long Trail
AT	Appalachian National Scenic Trail	LTA	Land Type Association
ATC	Appalachian Trail Conservancy	MA	Management Area
ATV	All-Terrain Vehicle	MBF	One Thousand Board Feet
BA	Biological Assessment	M&E	Monitoring and Evaluation
BE	Biological Evaluation	MMBF	One Million Board Feet
CE	Cumulative Effects	MIS	Management Indicator Species
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	MUSY	Multiple-Use and Sustained-Yield Act
CEQ	Council on Environmental Quality	NEPA	National Environmental Policy Act
CFR	Code of Federal Regulations	NF	National Forest
CMAI	Culmination Mean Annual Increment	NFMA	National Forest Management Act
cRNA	Candidate Research Natural Area	NFS	National Forest System
DBH	Diameter at Breast Height	NNIS	Non-native Invasive Species
DEIS	Draft Environmental Impact Statement	NOI	Notice of Intent
DFC	Desired Future Condition	NRA	National Recreation Area
EIS	Environmental Impact Statement	NRHP	National Register of Historic Places
ELT	Ecological Land Type	ORV	Off-Road Vehicle
EPA	Environmental Protection Agency	PAOT	People At One Time
ESA	Endangered Species Act	PILT	Payment in Lieu of Taxes
FEIS	Final Environmental Impact Statement	PNV	Present Net Value
FR	Forest Road	RAP	Roads Analysis Process
FS	Forest Service	RARE	Roadless Area Review and Evaluation
FSH	Forest Service Handbook	RD	Ranger District
FSM	Forest Service Manual	RFSS	Regional Forester Sensitive Species
FY	Fiscal Year	PPM	Parts Per Million
GIS	Geographic Information System	RN	Roaded Natural
GMNF	Green Mountain National Forest	RNA	Research Natural Area
		ROS	Recreation Opportunity Spectrum
		ROD	Record of Decision
		RSA	Recreation Special Area
		S&Gs	Standards and Guidelines
		SA	Special Area
		SHPO	State Historic Preservation Office
		SMS	Scenery Management System
		SPM	Semi-primitive Motorized

SPNM	Semi-primitive Non-motorized
SUP	Special Use Permit
SVE	Species Viability Evaluation
TES	Threatened, Endangered, and Sensitive
TEPS	Threatened, Endangered, Proposed, and Sensitive
TSI	Timber Stand Improvement
TDD	Telecommunication Device for the Deaf
TTY	Teletype
USDA	United States Department of Agriculture
USDI	United States Department of Interior
USFS	United States Forest Service
USFWS	USDI Fish and Wildlife Service
USNPS	USDI National Park Service
VIS	Visitor Information Services
VMS	Visual Management System
VQO	Visual Quality Objective
WFU	Wildland Fire Use
WSR	Wild and Scenic River
ZOI	Zone of Influence

Terms

The following definitions and/or descriptions clarify terminology used in the Proposed Plan and Draft Environmental Impact Statement. References are cited within parentheses. Where a reference is cited, it served as the primary source of the definition/description for that particular term. Where no reference is cited, the definition/description was developed for this Plan Revision from a variety of sources.

The descriptions and definitions are in alphabetical order.

[A]

ABIOTIC – Non-living. Climate is an abiotic component of ecosystems.

ACCEPTABLE MANAGEMENT PRACTICES (AMPs) – AMPs are a set of measures implemented during the course of logging, to prevent or minimize discharges such as mud, petroleum products, and woody debris, from getting into streams, ponds, lakes, and rivers. They are also meant to maintain natural water temperatures by requiring that trees be left along streams and other water bodies. Vermont has 14 AMPs. (Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont)

ACQUISITION – Obtaining land through purchase, exchange, and donation.

ADAPTIVE MANAGEMENT – A type of natural resource management that implies decisions are made as part of an on-going process. Monitoring the results of actions will provide a flow of information that may indicate the need to change a course of action. Scientific findings and the needs of society may also indicate the need to adapt resource management to new information.

ADMINISTRATIVE USE – Use of National Forest land, interests in land, or other resources, by the Forest Service, or an individual or entity authorized by the Forest Service, for purposes incidental to the protection, administration, or management of the National Forest.

AERIAL LOGGING – Removing logs from a timber harvest area by helicopter. Fewer roads are required, so the impact to an area is minimized.

AFFECTED ENVIRONMENT – The natural environment that exists at the time an area is being analyzed.

AGE CLASS – An age grouping of trees according to an interval of years, usually 20 years. A single age class would have trees that are within 20 years of the same age, such as 1-20 years or 21-40 years.

AIRSHED – A geographic area that shares the same air.

ALL-TERRAIN VEHICLE (ATV) – Any motorized, off-highway vehicle 50 inches or less in width, having a dry weight of 600 pounds or less that travels on three or more low-pressure tires with a seat designed to be straddled by the operator. Low-pressure tires are 6 inches or more in width and designed for use on wheel rim diameters of 12 inches or less, utilizing an operating pressure of 10 pounds per square inch (psi) or less as recommended by the vehicle manufacturer.

ALLOWABLE SALE QUANTITY (ASQ) – The amount of timber that may be sold within a certain time period from an area of suitable land. The suitability of the land and the time period are specified in the Forest Plan.

ALPINE ZONE – Elevated slopes above timberline, characterized by low, shrubby, slow growing woody plants and ground cover of boreal lichens, sedges, mosses and grasses.

ALTERNATIVE – Alternatives provide options for meeting the purpose and need of a Plan revision process by emphasizing reasonable ways to resolve management issues as though each alternative were a separate Forest Plan. While all alternatives provide a wide range of multiple uses, goods and services, they respond to the issues needing change in different ways and describe a different desired future condition.

AMERICANS WITH DISABILITIES ACT (ADA) – Law requiring that persons with disabilities not be denied access to the programs provided to all other people by state and local governments, public accommodations, public transportation, and commercial establishments, solely because of their disability. The ADA does not apply to the programs and facilities of federal agencies with the exception of designated wilderness (ADA Title V Sec. 507(c)).

ANADROMOUS FISH – Species of fish that mature in the sea and migrate into streams to spawn.

ANALYSIS OF THE MANAGEMENT SITUATION (AMS) – Using Resource Assessments and the existing Forest Plan as background, the AMS determines the ability of the area covered by the Forest Plan to supply goods and services in response to societal demands. The AMS speculates on the expected results or potential problems should the existing Forest Plan direction continue; discusses whether or not these problems need to be resolved and determines the potential to resolve them in a Plan Revision. If the Plan Revision can resolve potential problems, the AMS proposes a range of values within which a possible solution may occur.

ANNUAL MAINTENANCE – Work performed to maintain serviceability or repair failures during the year in which they occur. Includes preventive and/or cyclic maintenance performed in the year in which it is scheduled to occur. Unscheduled or catastrophic failures of components or assets may need to be repaired as a part of annual maintenance.

APPROPRIATE MANAGEMENT RESPONSE – Specific actions taken in response to a wildland fire to implement protection and fire use objectives (Zimmerman 1998).

AQUIFER – A body of rock that is saturated with water or transmits water. When people drill wells, they tap water contained within an aquifer.

AREA OF POTENTIAL EFFECT (APE) – The spatial extent of a proposed project's possible impact/effect, including non-contiguous areas like borrow pits, log landings, or equipment storage areas, within which significant Heritage Resources should be identified and protected. This term was established in the regulations pertaining to the National Historic Preservation Act.

ASPECT – The direction a slope faces. A hillside facing east has an eastern aspect.

ASSESSMENT (Resource Assessment) – A compilation of background material on the status of a particular resource area, on a local, regional, or national scale. A Resource Assessment describes the present condition of a particular resource and speculates on the future condition of the resource based on current and expected trends. Assessments address management problems, new policy and direction, monitoring results, and the existing condition of the resource on the forest.

[B]

BACKGROUND – A term used in the management of visual resources or scenery. It refers to the visible terrain located 4 miles to infinity from the viewer.

BASAL AREA – The cross-section area of a tree stem including bark, in square feet, and commonly measured at breast height (4.5 feet above ground). This parameter is often used in silvicultural equations and/or models for determining growth and yield of forest stands.

BENCHMARKS – (benefits, costs, and values) Benchmarks define the maximum and minimum levels of output. These limits take into account land capability, projected resource demands, and cost efficiency. The benchmark process demonstrates the Forests' ability to respond to timber harvesting issues and management concerns represented in the problem statements.

BENEFIT – Inclusive term used to quantify the results of a proposed activity, project, or program; expressed in monetary or non-monetary terms.

BIG GAME – Large mammals, such as deer and moose, that are hunted for sport.

BIOLOGICAL CONTROL – The use of natural means to control unwanted pests. Examples include introduced or naturally occurring predators such as wasps or hormones that inhibit the reproduction of pests. Biological controls can sometimes be alternatives to mechanical or chemical means.

BIOLOGICAL DIVERSITY (biodiversity) – The variety of life forms and processes within an area. Included in the consideration of diversity are genetic variation, number and distribution of species, and the ways in which the variety of biologic communities interact and function.

BIOLOGICAL EVALUATION (Threatened, Endangered, Proposed, and Sensitive Species) – The use of a variety of tools, including review of existing literature and data, field survey, and data gathering and analysis, to determine the presence of, and effects of activities on, threatened, endangered, proposed, and sensitive species (FSM 2670).

BIOMASS – The total weight of all living organisms in a biological community.

BIOME – The complex of living communities maintained by the climate of a region and characterized by a distinctive type of vegetation. Examples of biomes in North America include the tundra, desert, prairie, and the western coniferous forest.

BIOTA – The plant and animal life of a particular region.

BIOTIC – Living; for example, green plants and soil microorganisms are biotic components of ecosystems.

BOARD FOOT – A measurement term for lumber or timber. It is the amount of wood contained in an unfinished board 1 inch thick, 12 inches long, and 12 inches wide. Often used variations are MBF (thousand board feet) and MMBF (million board feet).

BROADCAST BURN – A prescribed fire that burns a designated area. These controlled fires can reduce wildfire hazards, improve forage for wildlife and livestock, or encourage successful regeneration of trees.

BROWSE – Twigs, leaves, and young shoots of trees and shrubs that animals eat. Browse is often used to refer to the shrubs eaten by big game, such as moose and deer.

BUFFER – A land area that is designated to block or absorb unwanted impacts to the area beyond the buffer. Buffer strips along a trail could block views that may be undesirable. Buffers may be set aside next to wildlife habitat to reduce abrupt change to the habitat.

[C]

CABLE LOGGING – Logging that involves the transport of logs from stump to collection points by means of suspended steel cables. Cable logging reduces the need for the construction of logging roads.

CANDIDATE RESEARCH NATURAL AREA (cRNA) – An area that has high potential for designation as a research natural area, and is being recommended for protection until it has undergone formal evaluation and it has been decided whether to designate it as an RNA (this authority rests with the Regional Forester, with concurrence of the Research Station Director) or to manage the area under another management area prescription.

CANOPY – The part of any stand of trees represented by the tree crowns. It usually refers to the uppermost layer of foliage, but it can be used to describe lower layers in a multi-storied forest.

CAPABILITY – The potential of an area of land to produce resources, supply goods and services, and allow resource uses under an assumed set of management practices and at a given level of management intensity. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology, as well as the application of management practices, such as silviculture or protection from fire, insects, and disease.

CAPITAL IMPROVEMENT – The construction, installation, or assembly of a new fixed asset, or the significant alteration, expansion, or extension of an existing fixed asset, to accommodate a change of purpose.

CAPITAL INVESTMENT – An input that increases the stock of natural or manmade resources (assets) needed to maintain or increase the flow of outputs in the future. Benefits resulting from capital investments are normally recouped in excess of one year.

CAVITY – A hole in a tree often used by wildlife species, usually birds, for nesting, roosting, and reproduction.

CHEMICAL CONTROL – The use of pesticides and herbicides to control pests and undesirable plant species.

CLASS 1 TREE – Those species of trees most likely to exhibit exfoliating bark, either as living trees or when dead, that are most likely to provide suitable roost sites for Indiana bats, as defined by Rommé et al. (1995). Class 1 trees include silver maple, shagbark hickory, shellbark hickory, bitternut hickory, green ash, white ash, eastern cottonwood, red oak, post oak, white oak, slippery elm, and American elm.

CLASS 2 TREE – Those species of trees of lesser value than Class 1 trees, but that may provide potential roost sites for Indiana bats, as defined by Rommé et al. (1995). Class 2 trees include sugar maple, shingle oak, and sassafras.

CLEANING – Form of release cutting that removes trees the same age as the young stand (FSM 2470).

CLEARCUT – Even-aged cutting method in which the entire standing crop of trees from an area is removed at one time (FSM 2470).

COARSE FILTER MANAGEMENT – Land management that attempts to address the needs of a majority of native species through management of natural landscapes and communities (see fine filter management).

COHORT – A population of plants or animals having approximately the same age.

COMMERCIAL FOREST LAND – Forest land that has not been withdrawn by Congress, the Secretary of Agriculture, or the Chief of the Forest Service, and is producing, or is capable of producing, crops of industrial wood without irreversible damage to soils, productivity, or watershed conditions, and with reasonable assurance that adequate restocking can be attained within five years after final harvesting.

COMMERCIAL OPERATIONS – Using timber sales for cost effective vegetation management on lands that are not part of the timber base.

COMMERCIAL THINNING – Thinning operation where the material cut can be sold on the market as opposed to a pre-commercial thinning.

COMMERCIAL USE (SPECIAL USES) – Any use or activity on National Forest System land where (a) an entry or participation fee is charged, or (b) the primary purpose is the sale of a good or service, and in either case, regardless of whether the use or activity is intended to produce a profit (36 CFR 251.51).

COMMON VARIETY MINERALS – Earth construction materials including rock or stone, sand and gravel, pumice aggregate, pumicite, cinders, and soil materials suitable for compacted earth structures.

COMMUNITY (Natural Community) – An interacting assemblage of organisms, their physical environment, and the natural processes that affect them (Thompson and Sorenson).

COMMUNICATION SITE – A developed area with a structure sufficient for placement of antennas for the transmission or reception of electronic intelligence at the proper height; a building or cabinet, a power line or onsite power supply, and an access route. Most are served by telephone or fiber optic lines.

COMPOSITION – The types of organisms and environmental features present in a particular area.

CONCENTRATED USE AREA – A relatively undeveloped area, outside of developed recreation sites, where management is invested because recreation use there leaves evident impacts.

CONCERN LEVEL – Similar to Viewer Sensitivity in the Visual Management System. Concern levels are a measure of the degree of public importance placed on landscapes viewed from travelways and use areas. Concern levels are divided into three categories: levels 1 (high), 2 (moderate), and 3 (low).

CONCOMITANT – Events that are coincident in time and so clearly related that one probably is a direct result of the other.

CONGRESSIONALLY DESIGNATED WILDERNESS – see Wilderness

CONIFER – A tree that produces cones, such as a pine, spruce, or fir tree.

CONNECTIVITY (of habitats) – A condition in which the spatial arrangement of land cover types allows organisms and ecological processes (such as disturbance) to move across the landscape. Connectivity is the opposite of fragmentation.

CONSTRAINT – A qualification of the minimum or maximum amount of an output or cost that could be produced or incurred in a given time period.

CONSUMPTIVE USE – Resource use that reduces the supply, such as logging and mining.

CONTOUR – A line drawn on a map connecting points of the same elevation.

CONVERTIBLE PRODUCTS – Timber products that can be measured in cubic feet of solid wood (FSH 2409.18, sec. 87).

CORRIDOR – A landscape feature that allows animal movement between two patches of habitat or between habitat and geographically discrete resources.

COVER – Any feature that conceals wildlife or fish. Cover may be dead or live vegetation, boulders, or undercut streambanks. Animals use cover to escape from predators, rest, and/or feed.

COVER FORAGE RATIO – The ratio of hiding cover to foraging areas for wildlife species.

COVER TYPE (forest cover type) – A descriptive classification of forestland based on existing tree species in a given land area (Eyre 1980).

CRITICAL HABITAT – Areas designated for the survival and recovery of species listed as threatened or endangered under the federal Endangered Species Act.

CROWN HEIGHT – The distance from the ground to the base of the crown of a tree.

CULMINATION MEAN ANNUAL INCREMENT (CMAI) – The point in the growth of a tree where mean annual increment (total tree volume at any point in time divided by total age) is at a maximum. This “culmination point” for mean annual growth is regarded as the ideal harvesting or rotation age in terms of most efficient volume production.

CULTURAL RESOURCE – see Heritage Resource

CUMULATIVE EFFECTS – Effects on the environment that result from separate, individual actions and that, collectively, become significant over time.

[D]

DECISION CRITERIA – The rules and standards used to evaluate alternatives to a proposed action on National Forest land. Decision criteria are designed to help a decision maker identify a preferred choice from the array of alternatives.

DECOMMISSION – Demolition, dismantling, removal, obliteration and/or disposal of a deteriorated or otherwise unneeded asset or component, including necessary cleanup work. This action eliminates the deferred maintenance needs for the fixed asset. Portions of an asset or component may remain if they do not cause problems or require maintenance.

DEER WINTERING AREAS (deer yards) – Land parcels that include two basic habitat components required by white –tailed deer during winter: shelter and browse. Softwood stands with high crown closure create cover, which provides protection from snow depth, wind, and cold temperatures. Mixed hardwood and softwood regeneration should provide accessible browse. The quality of deer wintering areas is determined by elevation, slope, aspect, soil types, and forest stand characteristics, including species composition, maturity, canopy closure and height. Deer wintering areas may be classified as primary or secondary sites:

- Primary sites are forests with poorly – drained silt or loam soils that are high in organic matter on flat or gently rolling terrain.
- Secondary sites include upland forests or abandoned agricultural lands with well – drained, sands, gravels, or tillable soils on gentle slopes, rolling terrain, or side hills.

DEFERRED MAINTENANCE – Maintenance that was not performed when it should have been or when it was scheduled and was therefore put off or delayed for a future period. When allowed to accumulate without limits or consideration of useful life, deferred maintenance leads to deterioration of performance, increased costs to repair, and decrease in asset value. Deferred maintenance needs may be categorized as critical or non-critical at any point in time. Continued deferral of non-critical maintenance will normally result in an increase in critical deferred maintenance.

DELAYED SHELTERWOOD – Even-aged cutting method in which most of a stand of trees is removed through a cutting designed to regenerate a new crop with seed and protection provided by a portion of the stand. No removal cut is implemented. The remaining portion of the stand is retained at least for 20 percent into the rotation of the new stand, but usually 40-60 years.

DEME – A locally interbreeding population of organisms.

DEN TREE – A live or dead tree, at least 10" dbh, containing a natural cavity in the main stem or with exfoliating bark used by wildlife for nesting, brood rearing, hibernating, roosting, daily or seasonal shelter and escape.

DEPARTURE – A schedule which deviates from the principle of non-declining flow by exhibiting a planned decrease in the timber sale and harvest schedule at any time in the future. A departure can be characterized as a temporary increase, usually in the beginning decade(s) of a planning period, over the base sale schedule that would otherwise be established, without impairing the future of a Forest's long-term sustained-yield capacity.

DESIGNATED COMMUNICATION SITE (SPECIAL USES) – An area of National Forest System land designated through the forest planning process. It may be limited to a single communications facility but most often includes more than one. A designated communication site provides the leaseholder more flexibility to manage other communication facilities on the site.

DESIRED FUTURE CONDITION – Land or resource conditions that are expected to result if goals and objectives are fully achieved.

DEVELOPED RECREATION – Recreation activities that are dependent on the presence of constructed features or facilities. Examples include camping in a campground or using a picnic area.

DEVELOPED RECREATION SITE - An area with a concentration of constructed features or facilities managed primarily for the enhancement of recreation activities. Examples include campgrounds, picnic areas, interpretive sites, and trailheads.

DIAMETER AT BREAST HEIGHT (dbh) – The diameter of a tree 4 and 1/2 feet above the ground on the uphill side of the tree.

DISPERSED RECREATION – Recreation that does not occur in a developed recreation site, such as hunting, backpacking, and scenic driving.

DISTURBANCE – Any relatively discrete event in space and time that disrupts ecosystem, community, or population structure and changes resources, substrate, or the physical environment (White and Pickett 1985).

DIVERSITY – The distribution and abundance of different plant and animal communities and species within the area covered by a land and resource management plan.

DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) – The draft version of the Environmental Impact Statement that is released to the public and other agencies for review and comment.

[E]

EARLY SUCCESSIONAL FOREST – The biotic (living) community that develops immediately following the removal or destruction of forest vegetation in an area. For instance, grasses may be the first plants to grow in an area that was burned.

EARLY SUCCESSIONAL SPECIES – Those plant or animal species characteristic of early successional forest stages.

EASEMENT – The right of use over the property of another owner.

ECOLOGICAL APPROACH – An approach to natural resource management that considers the relationships among all organisms, including humans, and their environment.

ECOLOGICAL LAND TYPE (ELT) – An area of land hundreds to low thousands of acres in size, with a well-known succession of forest species on unique soil materials. Ecological Land Type classification is based on geomorphic history, nature of soil substrata, and potential natural vegetation.

ECOLOGY – The interrelationships of living things to one another and to their environment, or the study of these interrelationships.

ECOREGION – An area over which the climate is sufficiently uniform to permit development of similar ecosystems on sites that have similar properties. Ecoregions contain many landscapes with different spatial patterns of ecosystems.

ECOSYSTEM – A dynamic arrangement of living organisms interacting with each other and their non-living environment. Living organisms include plants and animals. The non-living environment includes soils, landforms, weather, and disturbances.

ECOSYSTEM MANAGEMENT – An approach to the management of natural resources that strives to maintain or restore the sustainability of ecosystems and to provide present and future generations a continuous flow of multiple benefits in a manner that is harmonious with ecosystem sustainability.

ECOSYSTEM RESTORATION – The process of reestablishing, to the extent possible, the structure, function, and composition of ecosystems.

ECOTONE – The transition zone between two biotic communities, such as between a wetland and adjacent forest, or between a northern hardwood forest type and a spruce-fir forest type.

EDGE – The margin where two or more vegetation patches meet, such as a permanent or temporary opening next to a mature forest stand, or a northern hardwood stand next to an aspen stand.

ELEMENT (of ecosystems) – An identifiable component, process, or condition of an ecosystem.

ELIGIBILITY – Qualification of a river for possible inclusion in the national Wild and Scenic River system through determination that it is free-flowing and with its adjacent land area possesses at least one outstandingly remarkable value.

ENDANGERED SPECIES – A plant or animal that is in danger of extinction throughout all, or a significant portion, of its range. Endangered species are identified by the Secretary of the Interior in accordance with the Endangered Species Act of 1973.

ENDEMIC PLANT/ORGANISM – A plant or animal that occurs naturally in a certain region and whose distribution is relatively limited geographically.

ENVIRONMENTAL ANALYSIS – An analysis of alternative actions and their predictable long and short-term environmental effects. Environmental analyses include physical, biological, social, and economic factors.

ENVIRONMENTAL ASSESSMENT – A brief version of an Environmental Impact Statement.

ENVIRONMENTAL IMPACT STATEMENT (EIS) – A statement of environmental effects of a proposed action and alternatives to it. The EIS is released to other agencies and the public for comment and review.

EPHEMERAL STREAM – A stream, or portion of a stream, with a recognizable streambed, typically consisting of stones, cobbles, or bedrock, that flows only in direct response to precipitation and receives little or no water from springs and no long-continued supply from melting snow or other sources. Its channel is at all times above the water table.

ERICACEOUS – Pertaining to or like plants of the heath family, which are low growing woody plants with small evergreen leaves and small, bell-shaped, pink or purple flowers, common in nutrient-poor environments like bogs. Examples include heather or cranberry.

EROSION – The wearing away of the land surface by wind, water, ice, or other geological agents.

ESCAPE COVER – Vegetation of sufficient size and density to hide an animal, or an area used by animals to escape from predators.

EVALUATION PLANTATION – A planting of genetically superior trees to compare the performance of trees or families of trees, and to provide a source for future reforestation efforts.

EVEN-AGED SYSTEM – Silvicultural system that produces stands in which all trees are about the same age; that is, the difference in age between trees forming the main crown canopy level will usually not exceed 20 percent of the rotation length (FSM 2470).

EXPLORATION (MINERALS) – Establishing the location, size, grade, or reserves of a mineral or energy resource by gathering direct evidence of the resource. Direct data gathering techniques may include drilling holes or digging pits to sample or test a known suspected zone of interest.

EXTANT – Still in existence; not extinct, destroyed, or lost.

EXTIRPATE – Eradicate, or cause the extinction of, a plant or animal species on a local or regional scale. For example, eastern cougars and gray wolves were extirpated from Vermont by 1900 because of loss of habitat and directed killing for predator control.

EXTIRPATION – Eradication or extinction of a plant or animal species on a local or regional scale.

EXTRACTION – The process of mining or removing mineral deposits, oil, or gas from the earth.

[F]

FAUNA – The animal life of an area.

FEATHERING – Partial cutting of trees along an edge to create a transition in heights between areas and/or a transition in stand density between stands of different densities (FSH 559).

FELLING – Cutting down trees.

FINAL CUT – The removal of the last seed bearers or shelter trees after regeneration of new trees has been established in a stand being managed under the shelterwood system of silviculture.

FINE FILTER MANAGEMENT – Management that focuses on the welfare of a single species, or only a few species, rather than the broader habitat or ecosystem (see Coarse Filter Management).

FIRE CYCLE – The average time between fires in a given area.

FIRE MANAGEMENT PLAN – A strategic plan that defines a program to manage wildland and prescribed fires and documents the Fire Management Program in the approved land use plan. The plan is supplemented by operational plans such as preparedness plans, preplanned dispatch plans, prescribed fire plans, and prevention plans (Zimmerman 1998).

FIRE REGIME – The characteristics of fire in a given ecosystem, such as the frequency, predictability, intensity, and seasonality.

FIRE USE – The combination of wildland fire and prescribed fire application used to meet resource objectives (Zimmerman 1998).

FISHERIES HABITAT – Streams, lakes, and reservoirs that support, or have the potential to support, fish.

FIXED ASSET – A constructed feature such as a building, dam, bridge, road, campground, trail, or other item of infrastructure. Real property improvements. Facilities in the general sense. These are things for which we have a responsibility.

FLOOD PLAIN – A lowland adjoining a watercourse. At a minimum, the area is subject to a 1percent or greater chance of flooding in a given year.

FLORA – The plant life of an area.

FORAGE – All browse and non-woody plants that are eaten by wildlife.

FORB – A broadleaf plant that has little or no woody material in it.

FOREGROUND – A term used in management of visual resources or scenery. The part of a scene or landscape that is nearest to the viewer, generally found from the observer up to one-half mile away.

FOREST – When used with a capital “F,” this term refers to the Green Mountain National Forest.

FOREST COVER TYPE – see cover type

FOREST HEALTH – A measure of the robustness of forest ecosystems. Aspects of forest health include biological diversity; soil, air, and water productivity; natural disturbances; and the capacity of the forest to provide a sustainable flow of goods and services for people.

FOREST MATRIX – The least fragmented, most continuous pattern element of a landscape; the vegetation type that is most continuous over a landscape.

FOREST PLAN – see Land and Resource Management Plan

FOREST PLAN REVISION – A formal modification of an existing Forest Plan used to address changes in the natural, social, and economic environment. The Plan Revision takes into account new information and scientific knowledge about resources on and off National Forests that shed new light on the assumptions of the existing Plan, and make the predicted impacts of the existing Plan less accurate and/or acceptable.

FOREST ROADS OR TRAILS – 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 SUPERVISOR – The official responsible for administering National Forest lands on an administrative unit, usually one or more National Forests. The Forest Supervisor reports to the Regional Forester.

FOREST VEGETATION SIMULATON (FVS) – A national computer model used for growth and yield projections.

FRAGMENTATION – The physical division of contiguous areas into progressively smaller patches of increasing degrees of isolation from each other.

FROST HEAVE – A land surface that is pushed up by the accumulation of ice in the underlying soil.

FUELS – Plants and woody vegetation, both living and dead, that are capable of burning.

FUELS MANAGEMENT – The treatment of fuels that would otherwise interfere with effective fire management or control. For instance, prescribed fire can reduce the amount of fuels that accumulate on the forest floor before the fuels become so heavy that a natural wildfire in the area would be explosive and impossible to control.

FUELWOOD – Wood cut into short lengths for burning.

FUNCTION – All the processes within an ecosystem through which the elements interact, such as succession, the food chain, fire, weather, and the hydrologic cycle.

[G]

GAME SPECIES – Any species of wildlife or fish that is harvested according to prescribed limits and seasons.

GENERAL FOREST AREA – NFS lands outside of Developed Recreation Sites and trails, and excluding designated wilderness, that typically contain a wide spectrum of recreation settings and opportunities.

GEOCACHING – A sport where individuals or organizations set up caches, using Global Positioning System (GPS) coordinates, and share the locations of these caches on the Internet. GPS users can then use the location coordinates to find the caches.

GEOMORPHIC PROCESSES – Processes that change the form of the earth, such as volcanic activity, running water, and glacial action.

GEOMORPHOLOGY – The science that deals with the relief features of the earth's surface.

GEOGRAPHIC INFORMATION SYSTEMS (GIS) – GIS is both a database designed to handle geographic data as well as a set of computer operations that can be used to analyze data.

GLOBAL POSITIONING SYSTEM (GPS) – a navigational system using satellite signals to fix the location of a receiver on or above the earth's surface.

GOAL – A concise statement that describes a desired condition to be achieved sometime in the future. It is normally expressed in broad terms and is timeless in that it has no specific date by which it is to be completed. Goal statements form the principle basis from which objectives are developed. Goals serve as a blueprint for the Forest Plan and lay the groundwork for the rest of the Plan.

GOODS AND SERVICES – The various outputs, including on-site uses, produced by forest and rangeland resources (36 CFR 219.3).

GROUND FIRE – A fire burning along the forest floor that does not affect trees with thick bark or high crowns.

GROUND WATER – The supply of fresh water under the earth's surface in aquifers and soils.

GROUP SELECTION CUTTING – Uneven-aged cutting method in which small groups of trees, usually no more than one acre in size, are removed to meet a predetermined goal of size distribution and species in the remaining stand.

GUIDELINE – A guideline is a preferred or advisable course of action that promotes the achievement of Forest Plan goals and objectives. A project-level analysis and a signed decision (by the responsible official) are required in order to deviate from an established guideline.

GUIDING – Providing services or assistance (such as supervision, protection, education, training, packing, touring, subsistence, interpretation, or other assistance) to individuals or groups, in their pursuit of a natural resource-based outdoor activity, for pecuniary remuneration or other gain. The term "guide" includes the holder's employees, agents, and instructors.

[H]

HABITAT – The area where a plant or animal lives and grows under natural conditions.

HABITAT CAPABILITY – The ability of a land area or plant community to support a given plant or animal species.

HABITAT DIVERSITY – The number of different types of plant or animal species habitat within a given area.

HABITAT DIVERSITY INDEX – A measure of improvement in habitat diversity.

HARD SNAG – Snags composed essentially of sound wood on the outside.

HAZARDOUS FUELS – Naturally occurring vegetation, both live and dead, that given a wildfire occurrence would present a higher than normal resistance to control. Hazardous fuels may be measured by tons per acre, fuel arrangement, and/or continuity or burning characteristics.

HEALTHY FOREST- A condition wherein a forest has the capacity, across the landscape, for renewal, for recovery from a wide range of disturbances, and for retention of ecological resiliency, while meeting current and future needs of people for desired levels of values, uses, products and services.

HERITAGE RESOURCE – Historic landscapes, archaeological sites, buildings, structures, features, artifacts, Native American Traditional Cultural properties, and/or related clusters of these (referred to as “districts”). They are deemed “significant” if they meet, or may meet, the criteria for eligibility to the National and State Registers of Historic Places (NR). Any Heritage Resource that is considered significant (NR-eligible) may be referred to as a “historic property.”

HIBERNACULA – Plural form of hibernaculum.

HIBERNACULUM – A shelter, such as a cave or abandoned mine, occupied during the winter by a hibernating animal, such as an Indiana bat. A known Indiana bat hibernaculum is one in which Indiana bats have been found hibernating during any winter since 2000/2001.

HIGH RISK STAND – Stand that will not survive another ten years or will have a net loss of timber volume in the next ten years.

HORIZONTAL DIVERSITY – The distribution and abundance of different plant and animal communities, or different stages of plant succession, across an area of land; the greater the numbers of communities or successional stages in a given area, the higher the degree of horizontal diversity.

HYDROLOGIC CYCLE – Also called the water cycle, this is the process of water evaporating, condensing, falling to the ground as precipitation, and returning to the ocean as run-off.

HYDROLOGY – The study of water on the surface of the land, in the soil and underlying rocks, and in the atmosphere.

[I]

IGNEOUS ROCK – Rocks formed when high temperature, molten mineral matter cools and solidifies..

IMPLAN® – An economic impact assessment modeling system. IMPLAN allows the user to easily build economic models to estimate the impacts of economic changes in their states, counties, or communities.

IMPOUNDMENTS – Structures used to collect and confine water, as if in a reservoir.

IMPROVED ROAD – An improved road is any constructed or existing feature or facility created on the land for the purpose of travel by passenger vehicles (four wheeled, two wheel drive) which are legally owned and operated on Forest roads and highways, and vehicles are greater than 50 inches in width. Said facility will have an area for vehicles to travel on and will incorporate some manner for disposal of surface runoff.

IMPROVEMENT CUTTING – Intermediate cutting made in stands that are past the sapling stage, for the purpose of improving the composition and quality by removing trees of undesirable species, form, or condition, from the main canopy (FSM 2470).

INCIDENTAL TAKE – Harassment, harm, or other injury of an endangered or threatened species that occurs as a secondary result from an otherwise lawful activity. This is in contrast to “directed take,” in which the harassment, harm, or other injury is the specific purpose of the activity.

INDIANA BAT POTENTIAL MATERNITY ROOSTING HABITAT – lands where Indiana bat maternity roost sites are likely to occur, including:

- Lands adjacent to the Champlain Valley or in the Valley of Vermont (adjacent to Route 7) that are below 800 feet elevation (after Watrous et al., *in press*), and
- Other areas specifically identified by the US Fish and Wildlife Service.

INDICATOR SPECIES – A plant or animal species related to a particular kind of environment. Its presence indicates that specific habitat conditions are also present.

INDIGENOUS (species) – Any plant or animal species native to a given land or water area by natural occurrence.

INDIVIDUAL TREE SELECTION – Uneven-aged cutting method in which selected trees from specified size or age classes are removed over the entire stand area to meet a predetermined goal of size or age distribution and species composition in the remaining stand (FSM 2470).

INFRA – An integrated data management tool where Forest managers enter, manage, and report accurate information and associated financial data in an inventory of constructed features on the land (such as buildings, dams, bridges, water systems, roads, trails, developed recreation sites, range improvements, administrative sites, heritage sites, general forest areas and wilderness). The database also includes information on permits and contracts that alter Forest land.

INSTREAM FLOW – The quantity of water necessary to meet seasonal stream flow requirements to accomplish the purposes of the National Forests, including, but not limited to fisheries, visual quality, and recreational opportunities.

INTEGRATED PEST MANAGEMENT (IPM) – A process for selecting strategies to regulate forest pests in which all aspects of a pest-host system are studied and weighed. The information considered in selecting appropriate strategies includes the impact of the unregulated pest population on various resources values, alternative regulatory tactics and strategies, and benefit/cost estimates for these alternative strategies. Regulatory strategies are based on sound silvicultural practices and ecology of the pest-host system and may consist of a combination of tactics such as timber stand improvement plus selective use of pesticides. A basic principle in the choice of strategy is that it be ecologically compatible or acceptable.

INTERDISCIPLINARY TEAM – A team of individuals with skills from different disciplines that focuses on the same task or project.

INTERIOR FOREST – An area of late successional or old growth forest that is large enough, and of an appropriate shape, to provide conditions that minimize predation, parasitism, and microclimate fluctuations associated with forest edges. These interior forest conditions provide habitat for a diversity of wildlife and plant species.

INTERMEDIATE CUT – The removal of trees from a stand sometime between the beginning or formation of the stand and the regeneration cut. Types of intermediate cuts include thinning, release, and improvement cuttings (FSM 2470).

INTERMITTENT STREAM – A stream that flows 1. part of the time, such as after a rainstorm, during wet weather, or during part of the year. 2. only at certain times, when it receives water from springs (spring fed) or from some surface source (surface fed), such as melting snow in mountainous areas.

INTERPRETATION – Communication and education that forges emotional and intellectual connections between the interests of the audience and the inherent resource meanings.

INTRADEME INTERACTIONS – Interactions like breeding and dispersal within a locally interbreeding population of organisms or deme.

INVASIVE SPECIES – A species that is 1) non-native (or alien) to the ecosystem under consideration, and 2) whose introduction causes, or is likely to cause, economic or environmental harm or harm to human health.

INVASIVE SPECIES, APPROACHES:

- **Contain** – Prevent the spread of the invasive species beyond the perimeter of patches or infested areas. Tolerate invasive species within established infestation areas, but suppress or eradicate outside those areas.
- **Eradicate** – Totally eliminate an invasive species from the Forest or location. Eradication methods may include the following, either individually or in combination:
- **Suppress** – Prevent reproduction throughout the target area and reduce the area coverage of the invasive species. Prevent the invasive species from dominating the area, but accept low levels.
- **Tolerate** – Accept the continued presence of established infestations

and the probable spread to ecological limits for certain invasive species. Use preventive practices to preclude new infestations.

INVASIVE SPECIES, METHODS OF CONTROL:

- **Biological** – The deliberate introduction and establishment of natural enemies to reduce the target species' competitive or reproductive capacities. Includes, but is not limited to, insects and pathogens such as fungi. The purpose is not eradication, but to reduce densities and rate of spread to an acceptable level.
- **Chemical** – Direct and broadcast application of approved herbicides, following EPA label requirements, USDA policy, and Forest Service policy and direction (FSM 2150, FSH 2109.11, FSH 2109.12, and FSH 2109.13).
- **Cultural/Land Use** – Practices that discourage initial infestation of invasive species. Includes, but is not limited to, seeding, planting and retaining brush and tree canopy cover, and minimizing the extent and duration of exposed soil during management actions.
- **Physical/Mechanical** – Hand or mechanical labor to physically remove all or any part of the plant. Includes, but is not limited to, hand digging, mowing, tilling, and burning.

IRRETRIEVABLE – One of the categories of impacts mentioned in the National Environmental Policy Act to be included in Environmental Impact Statements. An irretrievable effect applies to losses of production or commitment of renewable natural resources. For example, while an area is used as a ski area, some or all of the timber production there is irretrievably lost. The loss of timber production during that time, however, is not irreversible, because it is possible for timber production to resume if the area is no longer used as a ski area.

IRREVERSIBLE – A category of impacts mentioned in statements of environmental impacts that applies to non-renewable resources, such as minerals and archaeological sites. Irreversible effects can also refer to effects of actions that can be renewed only after a very long period of time, such as the loss of soil productivity.

ISSUE – A subject or question of wide-spread public discussion or interest regarding management of National Forest System land..

[L]

LADDER FUELS – Vegetation located below the crown level of forest trees that can carry fire from the forest floor to tree crowns. Ladder fuels may be low-growing tree branches, shrubs, or smaller trees.

LAND ADJUSTMENT – Changing National Forest System land ownership through acquisition, exchange, or disposal of land or interest in land.

LAND ALLOCATION – The commitment of a given area and its resources to the compatible combination of goods, services, and uses specified by a regional management goal or by a past management prescription.

LAND CAPABILITY – Tendency of a land area to grow a particular natural community (i.e. hardwoods, spruce-fir) due to various environmental factors like soil or climate, if management were not applied. In many places on the Forest, the current community is different from land capability (as indicated by the Ecological Landtype) for the same area because past management altered the vegetation on the site. Given enough time without additional management, the vegetation may revert to the community indicated by land capability.

LANDFORM – A natural feature of the surface of the land; includes such features as slopes, valleys, plateaus, and ridges.

LANDING – Any place where cut timber is assembled for further transport from the timber sale area.

LANDLINE – National Forest System boundary lines.

LANDSCAPE – A large land area composed of interacting ecosystems that are repeated due to factors such as geology, soils, climate, and human impacts. Landscapes are often used for coarse filter analysis.

LAND AND RESOURCE MANAGEMENT PLAN (LRMP) – Formal name for the Forest Plan, the LRMP is a document that guides all long-range natural resource management activities for a National Forest. It is a roadmap and tool for reaching a collective vision for the future. It is a living, flexible document and can be amended to a variety of changing conditions over time. The plan establishes goals and management standards and guidelines for all management programs and practices, resource uses, and resource protection measures.

LAND USE PLANNING – The process of organizing the use of lands and their resources to best meet people's needs over time, according to the land's capabilities.

LAND TYPE ASSOCIATION (LTA) – Areas of common ecosystem characteristics that generally number in the thousands of acres. LTAs are defined by similarities in general topography, geomorphic processes, geology, soil and potential plant community patterns.

LATE SUCCESSIONAL FOREST – A forest in its mature and/or old-growth stages. (see Succession)

LEASABLE MINERALS – These include coal, oil, gas, phosphate, sodium, potassium, oil shale, and geothermal steam (FSM 2811.2).

LEAVE NO TRACE – A program supported by the non-profit Leave No Trace Center for Outdoor Ethics, in partnership with public and private land managers, to promote and inspire responsible outdoor recreation through education and research. Four federal land management agencies, including the USDA Forest Service, actively promote the Leave No Trace principles of responsible, low-impact use to build awareness, appreciation, and respect for our wildlands.

LIBERATION CUTTING – Form of release cutting that removes older, larger trees that overtop a more desirable younger stand (FSM 2470).

LIFE HISTORY – The sequence of changes making up the span of an organism's life.

LITTER (forest litter) – The freshly fallen, or only slightly decomposed, plant material on the forest floor. This layer includes foliage, bark fragments, twigs, flowers, and fruit.

LOGGING RESIDUE (slash) – The residue left on the ground after timber cutting. It includes unutilized logs, uprooted stumps, broken branches, bark, and leaves. Certain amounts of slash provide important ecosystem roles, such as soil protection, nutrient cycling, and wildlife habitat.

LONG-TERM SUSTAINED YIELD – The highest uniform wood yield from lands being managed for timber production that may be sustained under a specified management intensity consistent with multiple-use objectives.

LOW-QUALITY STAND – Stand made up of trees that have a poor potential to produce timber products.

[M]

M – Thousand. Five thousand board feet of timber can be expressed as 5M board feet.

MACRO-CLIMATE – The general, large scale climate of a large area, as distinguished from the smaller scale micro climates within it.

MAINTENANCE – The act of keeping fixed assets in acceptable condition. It includes preventive maintenance, normal repairs, replacement of parts and structural components, and other activities needed to preserve a fixed asset, so that it continues to provide acceptable service and achieves its expected life. Maintenance excludes activities aimed at expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than, those originally intended.

MANAGEMENT ACTION – Any activity undertaken as part of the administration of the National Forest.

MANAGEMENT AREAS – Areas of the National Forest designated in the Forest Plan as having similar management objectives. Similar to city planning zones.

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 (MIS) – A wildlife species whose population will indicate the health of the ecosystem in which it lives and, consequently, the effects of forest management activities to that ecosystem. MIS species are selected by land management agencies. (see Indicator Species)

MANAGEMENT PRACTICE – A specific activity, measure, course of action, or treatment.

MANAGEMENT PRESCRIPTION – Management practices and intensity selected and scheduled for application on a specific area to attain multiple-use and other goals and objectives.

MASS MOVEMENT/WASTING – The down-slope movement of large masses of earth material by the force of gravity. Also called a landslide.

MAST TREES – Species that provide nuts and fruits. These include the oak group, American beech, hop hornbeam and black cherry.

MATURE TIMBER – Trees that have attained full development, especially height, and are in full seed production.

MEAN ANNUAL INCREMENT OF GROWTH – The total increase in size or volume of individual trees. Can also refer to the increase in size and volume of a stand of trees at a particular age divided by that age in years.

MECHANIZED VEHICLES – Any contrivance which travels over ground, snow, or water on wheels, tracks, skids or by floatation, and is propelled by a living power source contained, or carried on or within, the device.

MESIC – moderately moist

METAPOPOPULATION – A group of locally interbreeding populations, or demes, each isolated in a patch of habitat. The persistence of the metapopulation is dependent on the persistence of the demes and movement of animals among demes to exchange genes.

MICRO-CLIMATE – The climate of a small site. It may differ from the macro-climate of the area due to aspect, tree cover (or the absence of tree cover), or exposure to winds.

MIDDLEGROUND – A term used in the management of visual resources, or scenery. It refers to the visible terrain between the foreground and background in a landscape. The area is located from one-half to four miles from the observer.

MINERAL – Inorganic material that includes sand, gravel, and stone.

MINERAL MATERIALS, COMMON VARIETY – Also referred to as Salable Minerals or Mineral Materials, include construction and landscaping materials (cinders, sand, gravel, boulders, loose rock and common clay) and minerals of similar occurrence commonly used as aggregate, rip-rap, ballast, borrow or fill.

MINERAL RIGHTS – Owning minerals beneath the surface of the ground; often it is someone other than the owner of the surface.

MINERAL SOIL – Soil that consists mainly of inorganic material, such as weathered rock, rather than organic matter.

MINIMUM TOOL ANALYSIS (MINIMUM TOOL CONCEPT) – The second step in the Forest Service process, Minimum Requirements Decision Guide (MRDG) that is used to identify, analyze, and select management actions that are the minimum necessary for wilderness administration. The Minimum Tool Analysis and the MRDG are applied to decisions that involve the 'prohibited uses' listed in Section 4(c) of the Wilderness Act. The concept is frequently referred to as determining the minimum "tool" but includes any type of activity, method, or equipment.

MISSION (of the USDA Forest Service) – "To Care for the Land and Serve the People." As set forth in law, the Forest Service mission is to achieve quality land management under the sustainable multiple-use management concept to meet the diverse needs of people.

MITIGATION – Actions taken to avoid, minimize, or rectify the impact of a land management practice.

MIXED STAND – A stand consisting of two or more tree species.

MONITORING AND EVALUATION – The periodic evaluation of forest management activities to determine how well objectives are met and how management practices should be adjusted. (see Adaptive Management)

MORTALITY – Trees that were merchantable and have died within a specified period of time. The term mortality can also refer to the rate of death of a species in a given population or community.

MOSAIC – Areas with a variety of plant communities over a landscape, such as areas with trees and areas without trees occurring over a landscape.

MOTORIZED VEHICLES – Any contrivance which travels over ground, snow, or water on wheels, tracks, skids, or by floatation and is propelled by a non-living power source contained or carried on or within the device.

MULTIPLE USE – Managing National Forest resources in a manner to best meet the needs of the American people, recognizing that not all uses can occur on all acres and that changing needs and conditions over time will change the combination and intensity of use. Productivity of the land and sustainability of ecosystems is maintained, and the interrelationships among resources and the effects of use are monitored and evaluated. Multiple-use management does not necessarily prescribe the combination of uses that will give the greatest dollar return or the greatest unit output.

[N]

NATIONAL AND STATE REGISTERS OF HISTORIC PLACES (NR) – Listings of historic properties (or heritage resources) that meet the criteria of significance established by the National Historic Preservation Act and the Vermont State Historic Preservation Act.

NATIONAL ENVIRONMENTAL POLICY ACT OF 1969 (NEPA) – Congress passed NEPA in 1969 to encourage productive and enjoyable harmony between people and their environment. One of the major tenets of

NEPA is its emphasis on public disclosure of possible environmental effects of any major action on public lands. Section 102 of NEPA requires a statement of possible environmental effects to be released to the public and other agencies for review and comment.

NATIONAL FOREST MANAGEMENT ACT OF 1976 (NFMA) – NFMA is the primary statute governing the administration of National Forests. NFMA requires the Secretary of Agriculture to assess forest lands, develop management programs based on multiple-use and sustained yield principles, and implement a Land and Resource Management Plan for each National Forest.

NATIONAL FOREST SYSTEM ROADS – Those roads wholly or partly within, or adjacent to and serving, the National Forests, and other areas administered by the Forest Service that have been included in the Forest Transportation Atlas (36 CFR 212.1 and 261.2).

NATIONAL FOREST SYSTEM TRAILS – Those trails wholly or partly within, or adjacent to and serving, the National Forests, and other areas administered by the Forest Service that have been included in the Forest Transportation Atlas (36 CFR 212.1 and 261.2).

NATIONAL PARK SERVICE (NPS) – The agency of the US Department of the Interior responsible for the administration of National Parks, Monuments, and Historic Sites. The NPS is distinct from the USDA Forest Service both administratively and by mission.

NATIONAL RECREATION AREA – Congressionally-designated areas that have outstanding combinations of outdoor recreation, aesthetic attractions, and proximity to potential users. They may also have cultural, historical, archaeological, pastoral, wilderness, scientific, wildlife, and other values contributing to public enjoyment.

NATIONAL QUALITY STANDARDS – The level of quality the Forest Service expects to provide the public at recreation sites and trails. These standards form the baseline for estimating the total cost of providing quality opportunities for recreation visitors and customers' desires.

NATIONAL TRAIL SYSTEM (National Recreation Trail System/National Scenic Trail System) – A national system of recreation, scenic and historic trails established in order to provide for the ever-increasing outdoor recreation needs of an expanding population and in order to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation. The Appalachian Trail and Long Trail are components of this system.

NATURAL BARRIER – A natural feature, such as a dense stand of trees or downfall, that will restrict animal travel.

NATURAL DISTURBANCE – see Disturbance

NATURAL INTEGRITY (a.k.a. ecosystem integrity) – The capability of an ecosystem to support and maintain the structure and function characteristic of its particular location.

NATURAL RANGE OF VARIATION – see Range of Variability

NEST SURVEY – A way to estimate the size of a bird population by counting the number of nests in a given area.

NEST TREE – Tree containing large nests, built by crows, herons, or hawks, that from the ground resemble a platform of sticks and are two to three feet in diameter. These may be used by owls, which do not build nests, or they may be re-used by crows, herons, and hawks, among other species.

NET PUBLIC BENEFITS – An expression used to signify the overall long-term value to the nation of all outputs and positive effects (benefits) less all associated inputs and negative effects (costs) whether they can be quantitatively valued or not. Net public benefits are measured by both quantitative and qualitative criteria rather than a single measure or index. The maximization of net public benefits to be derived from management of the National Forest units is consistent with the principles of multiple-use and sustained-yield management.

NO-ACTION ALTERNATIVE – The most likely condition expected to exist in the future if management practices continue unchanged.

NON-COMMERCIAL VEGETATIVE TREATMENT – The removal of trees for reasons other than timber production.

NON-CONSUMPTIVE USE – The use of a resource that does not reduce the supply. For instance, bird watching is a non-consumptive use of wildlife. Boating and fishing are non-consumptive uses of water.

NON-CONVERTIBLE PRODUCTS – Timber products that do not have a common standard conversion to cubic feet of solid wood (FSH 2409.18).

NON-DECLINING YIELD – A level of timber production planned so that the planned sale and harvest for any future decade is equal to or greater than the planned sale and harvest for the preceding decade.

NON-GAME – Wildlife species that are not hunted for sport.

NON-NATIVE INVASIVE SPECIES (NNIS) – An organism that has been purposefully or accidentally introduced outside its original geographic range, and that is able to proliferate and aggressively alter its new environment, causing harm to the economy, environment, or human health (Executive Order 13112)

NON-POINT SOURCE POLLUTION – Pollution whose source is not specific in location. The sources of the discharge are dispersed, not well defined, or constant. Rain storms and snowmelt often make this type of pollution worse. Examples include sediments from logging activities and runoff from agricultural chemicals.

NON-RECREATION SPECIAL USE PERMITS – A general definition other than the recreation class of special uses. These include agriculture, community and public information, energy generation and transmission, communications, feasibility, research, training, cultural resources, and historical classes, among other uses.

NON-RENEWABLE RESOURCE – A resource whose total quantity does not increase measurably over time, so that each use of the resource diminishes the supply.

NORTHERN HARDWOODS – Primarily sugar maple, yellow birch, and beech. May include red maple, white ash, black cherry, red spruce, and hemlock.

NOTICE OF INTENT (NOI) – A notice in the federal register of intent to prepare an environmental impact statement on a proposed action.

NOXIOUS WEED – A plant species generally considered detrimental to the environment, crops or other desirable plants, livestock, land, or other property, or to be injurious to public health. Noxious weeds can be native or exotic, invasive or non-invasive.

NUTRIENT CYCLE – The circulation of chemical elements and compounds, such as carbon and nitrogen, in specific pathways from the non-living parts of ecosystems into the organic substances of the living parts of ecosystems, and then back again to the non-living parts of the ecosystem. For instance, nitrogen in wood is returned to the soil as the dead tree decays. The nitrogen again becomes available to living organisms in the soil and, upon their death, the nitrogen is available to plants growing in that soil.

[O]

OBJECTIVE – A concise, time-specific statement of measurable and planned results that respond to pre-established goals. An objective forms the basis for further planning by defining both the precise steps to be taken and the resources to be used in achieving identified goals. Objectives identify quantities of items within the 15 year Forest Plan time frame.

OFF-ROAD VEHICLE (ORV) – Any motorized vehicle designed for or capable of cross-country travel on, or immediately over, land, water, sand, snow, ice, marsh, swampland, or other natural terrain; except that such term excludes (A) any registered motorboat, (B) any fire, military, emergency, or law enforcement vehicle when used for emergency purposes, and any combat or combat support vehicle when used for national defense purposes, and (C) any vehicle whose use is expressly authorized by the respective agency head under a permit, lease, license, or contract.

OFF SITE VIEWS – A term used in management of visual resources. The view beyond foreground, includes middleground and background views.

OLD GROWTH FOREST – A patch of relatively old forest of at least 5-10 acres that has escaped catastrophic or stand-replacing disturbance associated with the prevailing natural disturbance regimes of the Forest. Such old growth stands exhibit a long history of continuity and a demonstrated future via replacement dynamics.

ON-SITE VIEW – A term used in management of visual resources. *see* Foreground

OPENING – An area where crown closure of vegetation is less than 50 percent and height of vegetation is less than 20 percent of that of the surrounding trees. *See also* “permanent upland opening,” “temporary opening,” and “wetland opening.”

OPERATIONS – Activities related to the normal performance of the functions for which a fixed asset or component is intended to be used. Includes tasks such as janitorial services, vault toilet pumping, grounds upkeep, and law enforcement patrols.

ORGANIC SOIL – Soil at least partly derived from living matter, such as decayed plant material.

OUTFITTING – Providing, through rental or livery, any saddle or pack animal, vehicle or boat, tents or camp gear, or similar supplies or equipment, for pecuniary remuneration or other gain. The term "outfitter" includes the holder's employees, agents, and instructors.

OUTSTANDING MINERAL RIGHTS – Rights owned by a party other than the surface owner at the time the surface was conveyed to the United States.

OUTSTANDINGLY REMARKABLE VALUES –The identification of outstandingly remarkable values is one of the primary bases for determining Wild and Scenic River eligibility. The Wild and Scenic Rivers Act defines these values as those characteristics that make the river worthy of special protection. Outstandingly Remarkable Values can include scenery, recreation, fish and wildlife, geology, history, culture, and other similar values.

OVERMATURE TIMBER – Trees that have attained full development, particularly in height, and are declining in vigor, health, and soundness.

OVERSTORY – The upper canopy layer; the plants below comprise the understory.

[P]

PARENT MATERIAL – The mineral or organic matter from which the upper layers of soil are formed.

PARK-LIKE STRUCTURE – Stands with large scattered trees and open growing conditions, usually maintained by ground fires.

PARTIAL RETENTION – A visual quality objective which, in general, means man's activities may be evident but must remain subordinate to the characteristic landscape.

PASSERINE – A bird of the very large and diverse taxonomic order Passeriformes, sometimes referred to as perching birds or, less accurately, as songbirds. More than half of all living species of birds are passerines, including species as varied as chickadees, crows, jays, wrens, thrushes, swallows, warblers, and sparrows.

PATCH – An area of vegetation that is similar in structure and composition.

PATCH CUT – A clearcut that creates small temporary openings in a stand of trees, usually between one to 15 acres in size.

PEOPLE AT ONE TIME (PAOT) – A recreation capacity determination expressed in the number of people a recreation site, facility or area can accommodate at one time.

PERCOLATION – Downward flow or infiltration of water through the pores or spaces of rock or soil.

PERENNIAL STREAM – A stream that contains permanently present surface water and where water flows occur throughout the year except possibly during extreme drought or during extreme cold when ice forms (FSM 2526.05).

PERMANENT UPLAND OPENING – An opening dominated by perennial grasses, forbs, sedges and shrubs, that has less than 16 percent stocking of trees and less than 10 percent tree cover. Vegetation in permanent upland openings is periodically cut or burned to prevent vegetative succession and tree growth. Optimal size of permanent upland openings is one-half to ten acres. Permanent upland openings may be designed primarily for single or multiple uses, including but not limited to wildlife habitat, recreational uses, or scenic vistas.

PERSONAL USE – The use of a forest product, such as firewood, for home use and not for commercial use.

PERSONAL USE OF MINERALS – Recreational mineral activities which contribute to the personal enjoyment of mineral collecting as a leisure activity and not for the purpose of realizing personal financial gain either through the sale of the material or through an exchange for other goods or services. The exchange of mineral specimens, and/or the fabrication by the collector of functional or decorative items from the collected material, and the disposal of same, are not considered to constitute a commercial activity as long as the motive for doing so is the further enjoyment of a leisure activity and not for profit.

PEST – A plant, animal, or environmental stress which the land manager determines to be detrimental to achieving resource management objectives

PLANNING AREA – The area of National Forest land covered by a Regional Guide or Forest Plan.

PLANNING PERIOD – The time frame for which goods, services, and effects were projected in the development of the Forest Plan.

PLANTATION – A forest crop or stand raised artificially, either by seeding or planting of young trees.

POINT SOURCE POLLUTION – Pollution traceable to a discharge of pollutants from a discernable, confined, and discrete conveyance, such as a discharge from a sewage treatment plant.

POLE/SAPLING – The stage of forest succession in which trees are between 3 and 7 inches in diameter and are the dominant vegetation.

POLE TIMBER – Trees at least 5 inches in diameter, but smaller than the minimum size for sawtimber.

POTENTIAL NATURAL VEGETATION – The assemblage of plants that would form over time within the prevailing climatic and historical disturbance regimes.

PRE-COMMERCIAL THINNING – Removing some of the trees from a stand that are too small to be sold for lumber or house logs, so the remaining trees will grow faster.

PREDATOR – An animal that lives by preying on other animals. Predators are at or near the tops of food chains.

PRE-EXISTING USE – Land use that may not conform to a zoning ordinance but existed prior to the enactment of the ordinance.

PREFERRED ALTERNATIVE – Chosen from among the alternatives developed to address the range of solutions to the Forest's management problems. The Regional Forester, using the Decision Criteria, selects the preferred alternative that he/she feels best resolves management problems within the context of the mission and priorities of the Forest Service. This Alternative then becomes the basis for the Draft Forest Plan and Draft Environmental Impact Statement.

PREPARATORY CUT – The removal of trees near the end of a rotation to open the canopy and allow the crowns of seed bearing trees to enlarge. Improves seed production and encourages natural regeneration. (see Rotation)

PREPAREDNESS – Activities that lead to a safe, efficient, cost-effective fire management program in support of land and resource management objectives through appropriate planning and coordination (Zimmerman 1998).

PRESCRIBED FIRE – Any fire ignited by management actions to meet specific objectives. A written, approved prescribed fire plan must exist and NEPA requirements must be met prior to ignition (Zimmerman 1998).

PRESCRIPTION – Management practices selected to accomplish specific land and resource management objectives.

PRESENT NET VALUE (PNV) [a.k.a Net Present Value (NPV) or present net worth] – The difference between the discounted value (benefits) of all outputs to which monetary values or established market prices are assigned and the total discounted costs of managing the planning area.

PROCLAMATION BOUNDARY – National Forest boundary as proclaimed by the President of the United States.

PRODUCTIVE – The ability of an area to provide goods and services and to sustain ecological values.

PROTECTIVE STRIP – A portion of land that provides largely undisturbed soil to separate soil-disturbing activities from streams, ponds, wetlands, and seasonal pools. The purpose of the protective strip is to protect the soil's infiltration capacity and to filter out sediment.

PUBLIC LAND – Land for which title and control rests with a federal, state, regional, county, or municipal government.

PUBLIC INVOLVEMENT – The use of appropriate procedures to inform the public, obtain early and continuing public participation, and consider the views of interested parties in planning and decision making.

PULPWOOD – Wood suitable for manufacturing into wood pulp for paper products.

[R]

RANGE – Land on which the principle natural plant cover is composed of native grasses, forbs, and shrubs that are valuable as forage for livestock and big game.

RANGE MANAGEMENT – The art and science of planning and directing range use; intended to yield the sustained maximum animal production and perpetuation of the natural resources.

RANGE OF VARIABILITY (a.k.a. natural range of variation or historic range of variability) – The variability in composition, structure, and dynamics of ecosystems before EuroAmerican influence, including the variation of physical and biological conditions within an area due to climatic fluctuations and disturbances of wind, fire, and flooding.

RANGER DISTRICT – The administrative sub-unit of a National Forest that is supervised by a District Ranger who reports directly to the Forest Supervisor.

RAPTOR – A bird of prey, such as an eagle or hawk.

Roadless Area Review and Evaluation II (RARE II) – A national inventory of roadless and undeveloped areas within the National Forests and Grasslands that was completed in 1979.

RECHARGE – The addition of water to ground water by natural or artificial processes.

RECORD OF DECISION (ROD) – An official document in which a deciding official states the alternative that will be implemented from a prepared Environmental Impact Statement.

RECREATION EVENTS SPECIAL USE PERMITS – A special use designation within the Recreation Special Use category of "Facility Related Activities". Recreation events include organized events of a temporary nature, such as animal, vehicle, or boat races; fishing contests; rodeos; adventure games; and fairs

RECREATION OPPORTUNITY SPECTRUM (ROS) – A formal Forest Service classification system designed to delineate, define, and integrate outdoor recreation opportunities in land and resource management planning. ROS classes are used to describe all recreation opportunity settings, from natural, undisturbed, and undeveloped to heavily used, modified and developed. ROS designations attempt to describe the kind of recreation experience one may expect to have in a given part of the National Forest. The ROS classes include:

- **Urban** – This setting is characterized by a substantially urbanized environment,

although the background may have natural appearing elements. Affiliation with individuals and groups is prevalent, as is the convenience of sites and opportunities. Large numbers of users can be expected, both on-site and in nearby areas. Facilities for highly-intensified motor vehicle use and parking are available. Regimentation and controls are obvious and numerous.

- Rural – This setting is characterized by a substantially modified natural environment. Sights and sounds of humans are readily evident and the interaction between users is often moderate to high. A considerable number of facilities are designed for use by a large number of people, and are often provided for special activities. Facilities for intensified use and parking are available. Motorized use may be present on designated roads and trails and off-road (where not restricted). In this setting the probability for experiencing affiliation with individuals and groups is prevalent, as is the convenience of sites and opportunities. Opportunities for challenges, risk taking, and use of outdoor skills are generally unimportant. Management activities and designed roads or highways may dominate the natural landscape. Structures are readily apparent.
- Roaded Natural – This setting is characterized by a predominately natural appearing environment with moderate evidence of the sights and sounds of people. Interaction between users may be low to moderate, but with evidence of other users prevalent. Opportunities for both motorized and non-motorized forms of recreation are possible. Motorized use may be present on designated roads and trails, and off-road (where not restricted). In this setting there is an equal probability of experiencing affiliation with other user groups and experiencing isolation from sights and sounds of humans. Challenge and risk

opportunities associated with more primitive types of recreation are not very important. Natural settings may have modifications that range from being easily noticed to strongly dominant; roads and/or highways present; structures readily apparent.

- Semi-primitive Motorized – This setting is characterized by a predominately natural or natural appearing environment of moderate to large size (generally greater than 2,500 acres). Interaction between users is low, but there is often evidence of other users. Motorized use may be present on designated roads and trails and off-road (where not restricted). In this setting there is a moderate probability of experiencing isolation from the sights and sounds of humans and self-reliance through the application of outdoor skills in an environment that offers challenge and risk. Management activities mimic natural occurrences. Primitive roads may be present, structures are rare and isolated. Snowmobile use is possible.
- Semi-primitive Non-motorized – This setting is characterized by a predominately natural or natural-appearing environment of moderate to large size (generally greater than 2,500 acres). Interaction between users is low, but there is often evidence of other users. Motorized use is generally not present. In this setting there is a high probability of experiencing isolation from the sights and sounds of humans and self-reliance through the application of outdoor skills in an environment that offers challenge and risk. Management activities mimic natural occurrences. Primitive roads may be present and structures are rare and isolated.
- Primitive – A classification of wilderness and recreation opportunity. It is characterized by an essentially unmodified environment where trails may be present, but structures are rare, and where it is highly probable to be isolated from the sights and sounds of people.

ROS CLASS, DESIRED – Management tool used to describe the desired array of recreation settings across the Forest. Desired ROS classes guide recreation management and describe the desired condition of the Forest in the future. All management areas have an associated Desired ROS class to guide recreation management.

ROS CLASS, INVENTORIED – An inventory tool used to describe the existing array of recreation settings for lands within the Forest boundary. Inventoried ROS describes the existing condition of the Forest. (See also Recreation Opportunity Spectrum (ROS) and Desired ROS Class.)

RECREATION RIVER – Wild and Scenic Rivers Act Usage: Classification applied to rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

RECREATION SPECIAL USE PERMITS – A class of special use permits for recreation uses that serve the public, protect public health and safety, and protect the resource. These include such categories as outfitting and guiding, group use, facility related activities, and winter recreation. Within each of these categories there could be several “designations” of special use permits (FSM 2720).

REFORESTATION – The restocking of an area with forest trees, by either natural or artificial means, such as planting.

REGENERATION – The renewal of a tree crop by either natural or artificial means. The term is also used to refer to the young crop itself.

REGENERATION CUTTING (Harvest Cut) – Includes four basic cutting methods used to regenerate a forest: clearcut, seed-tree cut, shelterwood cut, and selection cut. Trees are removed from the stand to create conditions that will allow the forest to renew or reproduce itself. This is accomplished under either an even-aged management system or an uneven-aged management system.

REGIONAL FORESTER – The official of the USDA Forest Service responsible for administering an entire region of the Forest Service.

REGIONAL FORESTER’S 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.
- Significant current or predicted downward trends in habitat capability that would reduce a species existing distribution (FSM 2670.5).

RELEASE TREATMENT – Intermediate treatment or cutting designed to free a young stand (not past the sapling stage) of desirable trees from the competition of undesirable trees that threaten to suppress them. Cleaning and liberation cutting are types of release (FSM 2470).

REMOVAL CUT – The removal of the last seed bearers or shelter trees after regeneration is established.

REPAIR (OF ASSETS) – Work to restore a damaged, broken, or worn-out fixed asset, component, or item of equipment to normal operating condition. Repairs may be done as annual maintenance or deferred maintenance activities.

REHABILITATION (OF ASSETS) – Renovation or restoration of an existing fixed asset or any of its components in order to restore the functionality or life of the asset. Because there is no significant expansion or change of purpose for the fixed asset, the work primarily addresses deferred maintenance.

REPLACEMENT (OF ASSETS) – Substitution or exchange of an existing fixed asset or component with one having essentially the same capacity and purpose.

REPLACEMENT TREE – A live or partially dead tree left to become a hard snag and eventually a soft snag replacement.

RESEARCH NATURAL AREA (RNA) – A physical or biological unit in which current natural conditions are maintained insofar as possible. These conditions are ordinarily achieved by allowing natural physical and biological processes to prevail without human intervention. However, under unusual circumstances, deliberate manipulation may be utilized to maintain the unique feature that the Research Natural Area was established to protect. Research natural areas are part of a national network of ecological areas designated in perpetuity for research and education and/or to maintain biological diversity on National Forest System lands. RNAs are intended for non-manipulative research, observation, and study (FSM 4060).

RESERVE TREES – Trees left for wildlife in areas where timber is being cut. See snag, den, and mast trees.

RESIDUAL STAND – The trees remaining standing after an event such as selection cutting or thinning.

RESILIENCE – The degree, manner, and pace of restoration of the structure and function of the original ecosystem after disturbance (Westman 1978)

RESOURCE ASSESSMENT – A compilation of background material on the status of a particular resource area, on a local, regional and national scale. The Resource Assessment describes the present condition of a particular resource, and speculates on the future condition of the resource based on current and expected trends.

RESPONSIBLE OFFICIAL – The Forest Service employee who has been delegated the authority to carry out a specific planning action.

RESTORATION (of ecosystems) – see ecosystem restoration

REVEGETATION – The re-establishment and development of a plant cover by either natural or artificial means, such as re-seeding.

RIPARIAN AREAS – Riparian areas are three-dimensional ecotones (an ecological transition zone) where functional and process interactions take place between terrestrial and aquatic ecosystems. Riparian areas extend down into the groundwater, up above the canopy, outward across the floodplain and up the near-slopes draining water from the terrestrial ecosystem, and along the water course or feature. Riparian areas are geographically delineable, highly variable in width, and include the water feature: stream, wetland, pond, or seasonal pool (Paraphrased from Riparian Management in Forests of the Continental Eastern United States, p.29).

RIPARIAN ECOSYSTEM – A transitional ecosystem between the aquatic ecosystem and the adjacent terrestrial ecosystem; identified by soil characteristics or distinctive vegetation communities that require free or unbound water.

ROAD DECOMMISSIONING – Activities that result in the stabilization and restoration of unneeded roads to a more natural state.

ROAD DENSITY – Quantity of road mileage per unit area, commonly measured as miles of road per square mile of land area.

ROAD IMPROVEMENT – Activity that results in an increase of an existing road's traffic service level, expansion of its capacity, or change in its original design function.

ROAD MAINTENANCE – The ongoing upkeep of a road necessary to regain or restore the road to the approved road management objective (FSM 7712.3).

ROAD MANAGEMENT OBJECTIVE (RMO) – Defines the intended purpose of an individual road based on management area direction and access management objectives. Road management objectives contain design criteria, operation criteria, and maintenance criteria (FSH 7709.55).

ROAD OBLITERATION – Process of removing a road from the landscape. Obliterations are used on system and temporary roads, which are to be removed from service (decommissioned). Obliteration can include removing evidence of any access points; removing any structures from the roadbed (such as culverts, bridges, signs, guide rails, etc.); and restoring wetlands and riparian areas.

ROAD OPERATION MAINTENANCE LEVEL (ROML) – The level of service provided by, and maintenance required for, a specific road (FSH 7709.58).

- Level 1 (Closed for more than 1 year) – Assigned to intermittent-service roads during the time they are closed to vehicular traffic. The closure period must exceed 1 year. Basic custodial maintenance is performed to keep damage to adjacent resources to an acceptable level and to perpetuate the road to facilitate future management activities. Roads receiving maintenance Level 1 may be of any type, class, or construction standard, and may be managed at any other maintenance level while they are open for traffic. While being maintained at Level 1, they are closed to vehicular traffic, but may be open and suitable for non-motorized uses.
- Level 2 (High-clearance vehicles) – Assigned to roads open for use by high clearance vehicles. Passenger car traffic is not a consideration. Traffic is normally minor, usually consisting of one or a combination of administrative, permitted, dispersed recreation, or specialized uses. Log haul may occur at this level.
- Level 3 (Passenger vehicles; surface not smooth) – Assigned to roads open

and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities. Roads in this maintenance level are typically low speed, single lane with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed material.

- Level 4 (Passenger vehicles; smooth surface) – Assigned to roads that provide a moderate degree of user comfort and convenience at moderate traffic speeds. Most roads are double lane and aggregate surfaced. However, some roads may be single lane. Some roads may be paved and/or dust abated.
- Level 5 (Passenger vehicles-dust free; possibly paved) – Assigned to roads that provide a high degree of user comfort and convenience. These roads are normally double lane, paved facilities. Some may be aggregate surfaced and dust abated.

ROAD, PRIVATE – A road under private ownership authorized by a Special-Use Authorization, or a road that provides access pursuant to a reserved or private right.

ROAD, PUBLIC – Any road or street under the jurisdiction of and maintained by a public authority and open to public travel (23 U.S.C. 101(a)).

ROAD, TEMPORARY – Road authorized by contract, permit, lease, other written authorization, or emergency operation, not intended to be part of the forest transportation system and not necessary for long-term resource management.

ROAD, TRAFFIC SERVICE (LEVELS) –

- A: Free flowing, mixed traffic; stable, smooth surface; provides safe service to all traffic.
- B: Congested during heavy traffic, slower speeds and periodic dust; accommodates any legal-sized load or vehicle.
- C: Interrupted traffic flow, limited passing facilities, may not accommodate some vehicles. Low design speeds. Unstable surface under certain traffic or weather.

- D: Traffic flow is slow and may be blocked by management activities. Two-way traffic is difficult, backing may be required. Rough and irregular surface. Accommodated high clearance vehicles. Single purpose facility.

ROAD, UNCLASSIFIED – Roads on National Forest System lands that are not managed as part of the forest transportation system, such as unplanned roads, abandoned travelways, and off-road vehicle tracks that have not been designated and managed as a trail. Includes those roads that were once under permit or other authorization and were not decommissioned upon the termination of the authorization (36 CFR 212.1).

ROTATION – The number of years required to establish and grow timber crops to a specified condition of maturity.

ROUNDWOOD – Pulpwood and fuelwood prepared in the round state.

RUN-OFF – The portion of precipitation that flows over the land surface or in open channels.

[S]

SALVAGE CUTTING – Intermediate cutting made to remove trees that are dead or in imminent danger of being killed by injurious agents (FSM 2470).

SANITATION CUTTING – Intermediate cutting made to remove dead, damaged, or susceptible trees to prevent the spread of pests or pathogens (FSM 2470).

SAPLING – A general term for a young tree more than a few feet tall and an inch or so in diameter that is typically growing vigorously.

SAWTIMBER – Trees that are 9 inches in diameter at breast height or larger that can be made into lumber.

SCALE – In ecosystem management, it refers to the degree of resolution at which ecosystems are observed and measured.

SCENERY MANAGEMENT SYSTEM (SMS) – A systematic approach for determining the relative value and importance of scenery in a national forest. SMS is to be used in the context of ecosystem management to inventory and analyze scenery in a national forest, to assist in establishment of overall resource goals and objectives, to monitor the scenic resource, and to ensure high-quality scenery for future generations.

SCENIC RIVER – Wild and Scenic Rivers Act Usage: Classification applied to rivers, or sections of rivers, that are free of impoundments; where shorelines or watersheds are still largely primitive and shorelines are largely undeveloped, but accessible at places by a road.

SCOPING – The ongoing process to determine public opinion, receive comments and suggestions, and determine issues during the environmental analysis process. It may involve public meetings, telephone conversations, or letters.

SEASONAL POOL (a.k.a. vernal pool) – A seasonal pool is a contained basin depression lacking a permanent above ground outlet. In the Northeast, it fills with water with the rising water table of fall and winter or with the melt-water and runoff of winter and spring snow and rain. Many vernal pools in the Northeast are covered with ice in the winter months. They contain water for a few months in the spring and early summer. By late summer, a vernal pool is generally, but not always, dry.

A seasonal pool, because of its periodic drying, does not support breeding populations of fish. Many organisms have evolved to use a temporary wetland where they are not eaten by fish. These organisms are considered connected to, or indicative of, vernal pools because they use a vernal pool for various parts of their life cycle. In New England and New York, the easily recognizable connected species are the fairy shrimp, the wood frog, and salamanders of the genus *Ambystoma* (e.g. spotted, Jefferson, marbled, and blue-spotted salamanders). The

Green Mountain and Finger Lakes National Forests will define Seasonal Pools as those seasonally filled basins that are occupied for breeding purposes by one or more of these connected species (Kellogg et al. 2004).

SECOND-GROWTH FOREST – An area of forest that has established after some kind of human intervention that has removed some or all of the previous forested area.

SEED TREE CUTTING – Even-aged cutting method in which most of the mature timber from an area is removed in one cut except for a small number of desirable trees retained to provide seed or shelter for regeneration.

SENSITIVE SPECIES – See Regional Forester Sensitive Species

SERAL – Any stage of the sequence of changes in plant and animal communities on a site over time (see Succession).

SHADE TOLERANT SPECIES – Term used to describe plants that prefer to grow in the shade (ex. sugar maple or hemlock).

SHADE INTOLERANT SPECIES – Term used to describe plants that prefer to grow in sunny, open conditions (ex. aspen or paper birch).

SHELTERWOOD CUTTING – Even-aged cutting method in which a stand of trees is removed through a series of cuttings designed to establish a new crop with seed and protection provided by a portion of the stand (FSM 2470).

SHELTERWOOD WITH RESERVES – see Delayed Shelterwood

SIDE TRAIL (SPUR TRAIL/CONNECTING TRAILS) – Side trails and connecting trails provide additional points of public access to national recreation, national scenic or national historic trails and connections between such trails. Spur trails may intersect a national trail and provide passage to points of interest or facilities within the trail corridor.

SILVICULTURAL SYSTEM – Entire process by which forest stands are tended, harvested, and replaced. It includes all cultural practices performed during the life of the stand, such as regeneration cutting, fertilization, thinning, improvement cutting, and use of genetically improved sources of tree seeds and seedlings.

SILVICULTURE – Application of principles underlying the growth and development of single trees and of the forest as a biological unit, to control forest establishment, composition, structure and growth. The selection of an appropriate silviculture system for a management area depends on the stated resource objectives.

SINGLE TREE SELECTION – see Individual Tree Selection

SITE PREPARATION – The general term for removing unwanted vegetation, slash, roots, and stones from a site before reforestation. Naturally occurring wildfire, as well as prescribed fire can prepare a site for natural regeneration.

SIZE CLASS – One of the three intervals of tree stem diameters used to classify timber in the Forest Plan database. The size classes are: Seedling/Sapling (less than five inches in diameter); Pole Timber (five to seven inches in diameter); Sawtimber (greater than seven inches in diameter).

SKID ROADS (a.k.a. tractor roads) – Roads constructed for the purpose of transporting cut trees to a landing. They are ordinarily constructed by ground clearing and/or excavation (FSH 2409.15).

SKID TRAILS – Trails constructed for the purpose of transporting cut trees to a skid road or landing. The resultant ground disturbance created by skidding logs on the ground by all skidding and yarding methods. Skid trail construction normally does not include ground excavation or clearing (FSH 2409).

SKIDDING – Hauling logs by sliding with a cable, not on wheels, from stump to a collection point.

SKIJORING – A winter sport in which a person wearing skis is drawn over snow or ice by a dog.

SLASH – The residue left on the ground after timber cutting or left after a storm, fire, or other event. Slash includes unused logs, uprooted stumps, broken or uprooted stems, branches, bark, among others.

SLUMP – A landslide where the underlying rock masses tilt back as they slide from a cliff or escarpment.

SMALL GAME – Birds and small animals normally hunted or trapped.

SNAG – Includes standing dead or partially dead trees that are at least six inches in diameter at breast height (dbh) and 20 feet tall. (see Hard Snag and Soft Snag)

SNOWMOBILE – A motor vehicle that is designed exclusively for use over snow and that runs on a track or tracks and/or a ski or skis.

SOFT SNAG – Snags with wood, especially sapwood, in an advanced stage of decay.

SOIL COMPACTION – The reduction of soil volume. For instance, the weight of heavy equipment on soils can compact the soil and thereby change it in some ways, such as in its ability to absorb water.

SOIL PRODUCTIVITY – The inherent capacity of a soil to support the growth of specified plants, plant communities, or a sequence of plant communities. Soil productivity may be expressed in terms of volume or weight/unit area/year, percent plant cover, or other measures of biomass accumulation (FSM 2509.18, 2.05; Effective 9/3/91)..

SOIL QUALITY – The capacity of the soil to function within ecosystem boundaries to sustain biological productivity, maintain or enhance water and air quality, and support human health and habitation.

SOUND WOOD – Timber that is in solid, whole, good condition. Sound wood is free from damage, decay, or defects.

SPECIAL AREA (SA) – National Forest System lands (except wilderness) that contain outstanding examples of plant and animal communities, geological features, scenic grandeur, or other special attributes. SAs can be designated by the Forest Service or by legislation. SAs are managed to emphasize recreational and other specific related values. Other uses are permitted within SAs to the extent that they are in harmony with the purpose for which the area was designated.

SPECIAL FOREST PRODUCTS – Products or natural resources that are not the traditional timber and fiber products. Examples include such products as floral greenery, Christmas trees and boughs, mushrooms, transplants (trees, shrubs or herbaceous plants), cones, medicinal plants, cuttings, herbs, fuelwood, tree sap, nuts, berries, lichen, fungi, decorative wood, and pitch.

SPECIAL USE AUTHORIZATION – An authorization issued to an individual or group by the USDA Forest Service for use of National Forest land for a special purpose. Examples might be a Boy Scout Jamboree, a water system serving private land, or a mountain bike race. Authorizations can be in the form of permits, easements, or leases.

SPECIES OF LOCAL INTEREST – Species having State, or local, importance. These may be species with declining populations, appearing on State lists but not Federal Threatened and Endangered or Eastern Region's Sensitive Species lists; they may be locally abundant species presenting extraordinary opportunities.

SPECIES VIABILITY EVALUATION (SVE) – A qualitative process for gathering information on species for which viability may be a concern now or during the next 10 to 20 years. The process includes identifying at-risk species, compiling literature and unpublished information on those species, and using that information to develop and analyze Forest Plan revision alternatives.

SPECTRUM – A specific linear program model designed for Forest Service planning.

STAND – A group of trees that occupies a specific area and is similar in species, age, and condition.

STANDARD – A required course of action, or level of attainment, that promotes the achievement of forest plan goals and objectives. Standards found in a forest plan impose limits on natural resource management activities, generally for environmental protection.

STATE HISTORIC PRESERVATION OFFICE(R) (SHPO) – The National Historic Preservation Act establishes an oversight role for this office/position vis a vis federal agencies operating within the states. Thus, the SHPO must concur with federal agency decisions which have the potential to affect NR-eligible properties (a.k.a. “significant Heritage Resources”).

STEWARDSHIP – Caring for the land and its resources to pass healthy ecosystems to future generations.

STOCKING LEVEL – The number of trees in an area as compared to the desirable number of trees for best results, such as maximum wood production.

STRUCTURE – How the parts of ecosystems are arranged, both horizontally and vertically. Structure might reveal a pattern, mosaic, or total randomness of vegetation.

SUCCESSION – The sequence of changes in plant and animal communities on a site over time.

SUCCESSIONAL STAGE – see Seral

SUITABILITY – The appropriateness of certain resource management to an area of land. Suitability can be determined by environmental and economic analysis of management practices.

SUITABLE FOREST LAND – Forest land that constitutes the land base for determining the allowable sale quantity (ASQ) and is managed for timber production on a regulated basis.

SUMMER OFF-ROAD VEHICLE – All off-road vehicles except snowmobiles. (see Off-Road Vehicle)

SURFACE RESOURCES – Renewable resources that are on the surface of the earth, such as timber and forage, in contrast to ground water and minerals which are located beneath the surface.

SURFACE RIGHTS – Ownership of the surface of the land only; right to use the surface of the land.

SUSTAINABILITY (ecosystem sustainability) – The ability of an ecosystem to maintain its structure and function, and to remain resilient, in order to continue to support its biological diversity and productivity over time (see also resilience).

SUSTAINABILITY (general) – The ability of an ecological, economic, and/or social system to maintain structure and function, and to remain resilient, in order to continue to support biological diversity (including humans and their social and economic organization) and system productivity over time.

SUSTAINABLE – The yield of a natural resource that can be produced continually at a given intensity of management is said to be sustainable.

SUSTAINED YIELD – The yield that a renewable resource can produce continuously at a given intensity of management.

[T]

TAKE – Take is defined in the Endangered Species Act as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect any threatened or endangered species. Harm may include significant habitat modification that kills or injures a listed species through impairment of essential behavior such as nesting or reproduction.

TARGET – A National Forest's annual accomplishment goals for natural resource programs. Targets represent the commitment the Forest Service has to Congress to accomplish the work Congress has funded and are often used as a measure of the Agency's performance.

TAXON (TAXA) – A group of organisms at any level of the taxonomic hierarchy. The major taxa are the species and genus and the higher taxa, including the family, order, class, phylum, and kingdom. Minor taxa include subspecies and varieties.

TEMPORARY OPENING – An opening created by silvicultural treatment (e.g., clearcut or shelterwood cut), or natural event (e.g., wind throw, ice damage, pest outbreak), that is intended and allowed to be reoccupied by young trees. Temporary openings are dominated by tree seedlings and saplings and, with time, will grow into a wooded stand.

TEMPORARY ROAD – Road needed only for short-term use, such as by timber purchasers for access to a single timber sale.

THERMAL COVER – Cover used by animals against weather.

THINNING – Intermediate cutting made to stimulate the growth of the trees that remain and to increase the total yield of useful material from the stand (FSM 2470).

THREATENED SPECIES – Those plant or animal species likely to become endangered throughout all or a specific portion of their range within the foreseeable future as designated by the U.S. Fish and Wildlife Service under the Endangered Species Act of 1973.

TIMBER CLASSIFICATION – The classification of forested lands into land management alternatives according to how the land relates to management of the timber resource there.

TIMBER STAND IMPROVEMENT (TSI) – Actions to improve growing conditions for trees in a stand, such as thinning, pruning, prescribed fire, or release cutting.

TRACTOR LOGGING – A logging method that uses tractors to carry or drag logs from the stump to a collection point.

TRAIL – A designated path or travelway of varying width which is maintained for varied recreational uses.

TRAIL VEHICLE – Vehicles designed for trail use, such as bicycles, snowmobiles, trail bikes, trail scooters, and all-terrain vehicles (ATVs).

TREATMENT AREA – The site-specific location of a resource improvement activity.

TREE IMPROVEMENT – The science of dealing with the causes of resemblances and differences among trees related by descent. It considers the effects of genes and the response to environmental factors.

TYPE CONVERSION – The conversion of the dominant vegetation in an area from forested to non-forested or from one species to another.

[U]

UNDERBURN – A burn by a surface fire that can consume ground vegetation and "ladder" fuels.

UNDERSTORY – The trees and woody shrubs growing beneath the overstory in a stand of trees.

UNEVEN-AGED SYSTEM – Silvicultural system involving manipulation of a forest to simultaneously maintain: a) continuous high-forest cover, b) recurring regeneration of desirable species, and c) orderly growth and development of trees through a range of diameter or age classes to provide a sustained yield of forest products. Cutting methods that develop and maintain uneven-aged stands are single-tree selection and group selection (FSM 2470).

UNREGULATED HARVEST – Tree harvest that is not part of the allowable sale quantity (ASQ). It can include the removal of cull or dead material or non-commercial species. It also includes volume removed from non-suitable areas for research, to meet objectives other than timber production (such as wildlife habitat improvement), or to improve administrative sites (such as campgrounds).

UNSUITABLE LANDS – Forest land that is not managed for timber production because (a) the land has been withdrawn by Congress, the Secretary of Agriculture, or the Chief of the Forest Service; (b) the land is not producing or capable of producing crops of industrial wood; (c) technology is not available to prevent irreversible damage to soils, productivity, or watershed conditions; (d) there is no reasonable assurance that lands can be adequately restocked within 5 years after final harvest, based on existing technology and knowledge, as reflected in current research and experience; (e) there is at present, a lack of adequate information to respond to timber management activities; or (f) timber management is inconsistent with or not cost efficient in meeting the management requirements and multiple use objectives specified in the forest plan.

USE-CYCLE APPROACH – Periodically moving users between ski areas; the use cycle approach involves generally allowing much of the overstory to grow and mature naturally, concentrating management on the intermediates (thinning to enable tree skiing), while protecting and encouraging reproduction. Use-cycling would be dependent on the desired timing of regeneration as well as the health of the overstory. With this approach, it appears possible to achieve the continuous uneven-aged forest cover and desired stocking level objectives by working primarily with the intermediate height class.

UTILITY CORRIDOR – A linear tract of land of varying width, forming a passageway through which various commodities such as oil, gas, electronic intelligence, and electricity may be transported.

[M]

VARIETY CLASS – A way to classify landscapes according to their visual features. This system is based on the premise that landscapes with the greatest variety or diversity have the greatest potential for scenic value.

VEGETATION MANAGEMENT – Activities designed primarily to promote the health of forest vegetation for multiple-use purposes.

VEGETATION TYPE – A plant community with distinguishable characteristics.

VERNAL POOL – see Seasonal Pool

VERTICAL DIVERSITY – Stand diversity that results from different canopy layers or tiers of vegetation.

VIALE POPULATION – A population that has the estimated numbers and distribution of reproductive individuals to ensure the continued existence of the species throughout its existing range within the planning area (FSM 2670.5).

VIEWER SENSITIVITY – Amount and expectation of viewers determined for all areas of the National Forest using the definitions described below.

High Viewer Sensitivity Locations: U.S. or State highways; Roads averaging at least 150 vehicles per day; Roads primarily providing access to highly sensitive recreation sites; National Scenic or National Recreation trails including side trails; Heavily used seasonal trails through areas with recognized scenic attractions; eligible and designated Wild, Recreational, and Scenic Rivers that provide outstanding or substantial scenic values; Riparian areas with heavy fishing, boating, swimming, and other uses highly dependent on viewing scenery; Wilderness; Recreation Special Areas; Ecological Special Areas with unique scenic features; Town centers or concentrations of residences; Developed recreation sites except for trailheads within moderately sensitive locations; White Rocks Cliffs and Ice Beds in the

White Rocks NRA; Observation sites along highly sensitive travelways.

Moderately sensitive locations do not qualify as highly sensitive but get more than twice as much use as general undeveloped areas that provide the same recreation opportunity.

Moderately sensitive locations include the following areas: Roads and trails shown on National Forest recreation maps except those described as least sensitive; Concentrated use sites and observation sites along moderately sensitive travelways; Eligible and designated Wild, Recreational and Scenic Rivers that provide locally common scenic values; Riparian areas receiving low to moderate use which is double that of adjacent undeveloped lands;

Least sensitive locations are all areas not qualifying as having high or moderate sensitivity. They include: Travelways maintained primarily for non-recreation purposes such as timber access roads and utility line clearings; Areas where use primarily has little dependence on scenic viewing. Use examples include hunting or gathering of fuelwood and Christmas trees.

VISUAL CONDITIONS:

- Permanent – A visual condition is being maintained over time. Permanent alterations include but are not limited to: wetland and permanent upland openings, scenic vistas, parking areas, roads, trails, signs, ski facilities, towers, and other structures.
- Temporary – A visual condition is allowed to recover over time. Temporary alterations include but are not limited to: timber harvest.
- Enhancement – A visual condition is improved by increasing positive scenic attributes in the landscape.
- Rehabilitation – A visual condition is improved by removing existing visual impacts.

VISUAL QUALITY OBJECTIVE (VQO) – A desired level of excellence based on physical and sociological characteristics of an area. Refers to degree of acceptable alteration of the natural appearing landscape. The five levels of VQO are:

- (1) Preservation – Alterations are caused by ecological changes only.
- (2) Retention – Alterations made by people are not visually evident to the casual forest visitor
- (3) Partial Retention – Alterations made by people must appear subordinate within the surrounding natural appearing landscape.
- (4) Modification – Alterations may dominate the original surrounding landscape, but constructed facilities must be compatible with the landscape.
- (5) Maximum Modification – Alterations dominate the original surrounding landscape to a high degree, and do not relate completely to natural appearing form, line, color, or texture.

VISUAL RESOURCE – A part of the landscape important for its scenic quality. It may include a composite of terrain, geologic features, or vegetation.

[W]

WATCH LIST – A list of plant and animal species that may be of concern to the Forest, but which do not meet criteria for inclusion in the Regional Forester's Sensitive Species list. These species could include those that are not known to occur now on the Forest although they may have historically been here; species that may not be of viability concern on the Forest but are rare or listed in the State; species that are exhibiting population trends that are starting to be of concern, but not to the point where viability on the Forest is at moderate or high risk; or species that are new to the Forest and have not yet been evaluated for viability.

WATERSHED – The entire region drained by a waterway or into a lake or reservoir. More specifically, a watershed is an area of land above a given point on a stream that contributes water to the streamflow at that point.

WATER TABLE – The upper surface of groundwater. Below it, the soil is saturated with water.

WATER YIELD – The runoff from a watershed, including groundwater outflow.

WETLAND – Those areas that under normal circumstances are inundated by surface or ground water with a frequency sufficient to support a prevalence of vegetation or aquatic life that requires saturated or seasonally-saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar area such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds (FSM 2527.05).

WETLAND OPENING – Includes open and shrub wetland areas dominated by mosses, herbaceous plants, and shrubs of varying heights. Trees are absent or sparse, generally representing less than 25 percent of the cover. Wetland openings on the GMNF include beaver meadow complexes, shrub swamps, open peatlands (including bogs and fens), marshes, sedge meadows, wet upland meadows, and wet shores. Most open wetlands on the GMNF are associated with rivers and are influenced by recent beaver activity; few are old and stable wetlands like peatlands. See also “wetland.”

WHOLE TREE LOGGING – The process of felling and transporting the trimmed bole in one piece to a landing. The bole is then separated into wood products at the landing that include sawlogs, pulpwood, firewood, and/or tops for wood chips.

WILD RIVER – Wild and Scenic Rivers Act Usage: Congressionally-designated rivers, or sections of rivers, that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted.

WILDERNESS – The Wilderness Act of 1964 defined a wilderness as an area of undeveloped federal land designated by Congress that has the following characteristics: (1) It generally appears to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable; (2) It has outstanding opportunities for solitude or a primitive and unconfirmed type of recreation; (3) It has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) It may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value (Wilderness Act, Sec. 2(c)).

WILDLAND FIRE – Any non-structure fire, other than prescribed fire, that occurs in the wildland (Zimmerman 1998).

WILDLAND FIRE SUPPRESSION – An appropriate management response to wildland fire that results in curtailment of fire spread and eliminates all identified threats from the particular fire. All wildland fire suppression activities provide for firefighter and public safety as the highest consideration, but minimize loss of resource values, economic expenditures, and/or the use of critical firefighting resources (Zimmerman 1998).

WILDLAND FIRE USE – The management of naturally-ignited wildland fires to accomplish specific pre-stated resource management objectives in predefined geographic areas outlined in Forest Fire Management Plans. Operational management is described in the Wildland Fire Implementation Plan. Wildland fire use is not to be confused with “fire use,” which is a broader term encompassing more than just wildland fires (Zimmerman 1998). (see Fire Use)

WILDLIFE HABITAT DIVERSITY – The distribution and abundance of different plant and animal communities and species within a specific area.

WINDTHROW – Trees uprooted by wind.

WIND TOWERS – Includes individual wind towers for wind energy testing and monitoring facilities (small individual site-specific meteorological towers and instrumentation facilities) as well as wind energy development projects (includes wind turbine facilities, as well as access roads, electrical and transmission facilities, and other support facilities).

WOOD FIBER PRODUCTION – The growing, tending, harvesting, and regeneration of harvestable trees.

[Z]

ZONE OF INFLUENCE (ZOI) – The area influenced by Forest Service management activities.