

APPENDIX E

GLOSSARY

Glossary

A

Access – The opportunity to approach, enter, and make use of public or private lands.

Affected Environment – The issue-specified current environment that may be affected by implementation of an alternative.

Allowable Sale Quantity –The quantity of timber that may be sold from the area of suited land covered by the Forest Plan for a time period specified by the Plan. The quantity is usually expressed on an annual basis as the “average annual allowable sale quantity.”

Alternative – One of several policies, plans or projects proposed for decision making.

Artificial Regeneration – Renewal of a forest stand by direct seeding or by planting seedlings.

B

Bark Beetle – A tiny black insect, ranging in size from 4 to 10 mm that bores its way into the tree’s cambium and cuts its supply of food, thus killing the tree. Different species of beetle attack different species of tree.

Basal Area – The area of the cross-section of a tree inclusive of bark at breast height (4.5 feet above the ground) most commonly expressed as square feet per acre.

Best Management Practices (BMP) – A practice or combination of practices that are the most effective and practical (including technological, economic, and institutional considerations) means of preventing or reducing the amount of pollution generated by non-point sources to a level compatible with water quality goals.

Big Game – Certain wildlife that may be hunted for sport under state laws and regulations. In the Black Hills, these animals include deer, elk, turkey, mountain goats, and bighorn sheep.

Big Game Summer Range – The area available to and used by big game through the summer season.

Big Game Winter Range – The area available to and used by big game through the winter season.

Fanny Project Area

DRAFT Environmental Assessment

Biological Evaluation – An analysis of the potential effects on threatened, endangered or sensitive plant or animal species to: (1) Ensure that activities do not contribute to loss of viability of any native or desirable non-native plant or contribute to animal species Federal listing or trend toward Federal listing; (2) Comply with the requirements of the Endangered Species Act, that actions of Federal agencies not jeopardize or adversely modify critical habitat of Federally listed species; (3) provide a process and standard by which to ensure that threatened, endangered proposed, and sensitive species receive full consideration in the decision making process.

Board Foot – A unit of timber measurement equaling the amount of wood contained in a board 1 inch thick, 12 inches long and 12 inches wide.

Burn Intensity – A relative measure of fire intensity based on the post-fire visual appearance of the vegetation canopy used for the purpose of mapping and interpreting fire impacts. Three categories of burn intensity are defined: low, moderate, and high.

- **Low** – Trees are all or partially green. Initial conifer mortality due to the direct effect of fire is relatively low. Ocular estimates place this mortality at 20 percent.
- **Moderate** – Crowns are entirely or almost entirely scorched. Conifer mortality is nearly 100 percent.
- **High** – All tree crowns are consumed by fire, leaving only black needleless trees. Conifer mortality is 100 percent.

C

Candidate Species – Species for which the U.S. Fish & wildlife Service has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposed rule to list but issuance of the proposed rule is precluded.

Canopy – The foliar cover in a forest stand consisting of one or several layers.

Canopy Closure (crown cover) – The ground area covered by the crowns of trees or woody vegetation as delimited by the vertical projection of crown perimeters and commonly expressed as a percent of total ground area.

Climax – The culminating stage in plant succession for a given site. Climax is reached when a given plant community can indefinitely perpetuate itself under existing conditions. A climax plant community is assumed to have reached a stable condition.

Climax Species – A species that can perpetuate itself in a given climax plant community.

Contour Felling – Falling and placement of trees on the contour of a slope for erosion control.

Cover Type – The vegetative species that dominates a site. Cover types are named for one plant species or non-vegetated condition presently (not potentially) dominant, using canopy or foliage cover as the measure of dominance.

Fanny Project Area

DRAFT Environmental Assessment

Crown – The upper portion of a tree or other woody vegetation that supports branches and foliage.

Culmination of Mean Annual Increment (CMAI) – The point at which a tree or stand achieves its greatest average growth, based on expected growth, according to the management systems and utilization standards assumed in the Forest Plan.

Cultural Resource – See “Heritage Resource”.

Cumulative Effects – The impact on the environment, which results from the incremental impact of the action when added to other actions. Cumulative impacts can also result from individually minor but collective, individual actions over a period of time.

D

Decommission - This strategy is very similar to eliminate use with the exception that all drainage will be restored to natural slopes, i.e. all cmps will be removed and their respective fills will be sloped back to allow natural flow through the drainage. If the road was identified as forest system road, it will be taken off of the system. Vegetation shall be reestablished to minimize soil movement.

Density (Tree or Stand Density) – A quantitative measure of stocking expressed either absolutely in terms of number of trees, basal area, or volume per unit area or relative to some standard condition.

Developed Recreation – Recreation that requires facilities that, in turn, result in concentrated use of an area. Examples of recreation areas are campgrounds and ski areas; facilities in these areas might include roads, parking lots, picnic tables, toilets, drinking water, ski lifts, and buildings.

Diameter at Breast Height (dbh) - The diameter of a standing tree measured 4 feet 6 inches above ground level.

Dispersed Recreation – A general term referring to recreation use outside the developed recreation site; this includes activities such as scenic driving, hiking, off-road vehicle use, hunting, backpacking, and recreation in primitive environments.

Distance Zone – Landscape areas denoted by specified distances from the observer. Used as a frame of reference in which to discuss landscape attributes or the scenic effect of human activities in a landscape.

- **Immediate Foreground** – The detailed feature landscape found within the first few hundred feet of the observer, generally from the observer to 300 feet away. This distance zone is normally used in project level planning, not broad scale planning.

Fanny Project Area

DRAFT Environmental Assessment

- **Foreground** – Detailed landscape generally found from the observer to one-half mile away.
- **Middleground** – The zone between the foreground and background in the landscape. The area located from one-half mile to 4 miles from the observer.
- **Background** – The distant part of a landscape. The landscape area located 4 miles to infinity from the viewer.

Diversity – The distribution and abundance of different plant and animal communities and species within the area covered by a land and resource management plan. This term is derived from the National Forest Management Act (NFMA). This term is not synonymous with “biological diversity.”

Draft Environmental Impact Statement (DEIS) – The statement of environmental effects required for major Federal actions under Section 102 of the National Environmental Policy Act, and released to the public and other agencies for comment and review.

E

Ecological Process – The action or events that link organisms and the environment, such as; predation, mutualism, successional development, nutrient recycling, carbon sequestration, primary productivity and decay.

Ecosystem – (1) A community of living plants and animals interacting with each other and with their physical environment. A geographic area where it is meaningful to address the interrelationships with human social systems, sources of energy, and the ecological processes that shape change over time. (2) The complex of a community of organisms and its environment that functions as an integrated unit; for example, forests, ponds, rivers, rotting logs, and planet earth. Ecosystems exist at various scales.

Effects – The environmental consequences as a result of a proposed action. Included are direct effects, which are caused by the action and occur at the same time and place, and indirect effects, which are caused by the action and are later in time or further removed in distance, but which are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern or land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Endangered Species – Any species of animal or plant that is in danger of extinction throughout all or a significant portion of its range and so designated by the Secretary of the Interior as endangered in accordance with the 1973 Endangered Species Act.

Environmental Impact Statement (EIS) – A statement of environmental effects of a proposed action and alternatives to it. It is required for major Federal actions under Section 102 of the National Environmental Policy Act (NEPA) and released to the public

Fanny Project Area

DRAFT Environmental Assessment

and other agencies for comment and review. It is a formal document that must follow the requirements of NEPA, the council on Environmental Quality (CEQ) guidelines, and directives of the agency responsible for the project proposal.

F

FDR – See “Forest Development Road.”

Fire Frequency – The number of wildland fires occurring in a given area over a given time.

Fire Intensity – The rate of heat energy released per unit length of fire front. Numerically, it is the product of the heat of combustion, quantity of fuel consumed per unit area in the fire front, and the rate of spread of a fire, usually expressed in Btu per second per foot of fire front, or in kilowatts per meter.

Fireline – Generally, any cleared or treated strip used to control a fire’s spread; more specifically, that portion of a control line from which flammable materials have been removed by scraping or digging to mineral soil.

Fire Severity – Degree to which a site has been altered or disrupted by fire. Three levels of fire severity are recognized: low (light), moderate, and high (severe).

- **Low-severity** – Described as burned areas with low to medium hydrophobic class ratings and slight to moderate consumption of surface litter.
- **Moderate-severity** – Included areas that had up to 20-40% of the area exhibiting a thin but strong hydrophobic layer near the surface of the mineral layer.
- **High-severity** – These areas characteristically show a strong, discontinuous hydrophobic layer that extends for up to 3 inches in depth and included white ash, and loss of soil structure and total consumption of surface organic matter.

Fire Suppression – All work and activities associated with fire-extinguishing operations, beginning with discovery and continuing until the fire is completely extinguished.

Floodplain – That portion of a river valley, adjacent to the channel, which is built of sediments deposited during the present regimen of the stream and covered with water when the river overflows its banks at flood stages.

Forest Development Roads – A Forest road under the jurisdiction of the Forest Service. Forest Development roads are not intended to meet the transportation needs of the public at large. Generally, these roads are constructed to a standard to serve expected traffic generated by resource management. Although generally open and available for public use, the Forest Service may restrict or control use to meet specific management direction. These roads fall under one of three classifications:

Fanny Project Area
DRAFT Environmental Assessment

ARTERIAL ROAD These roads provide service to large land areas, usually greater than 20,000 acres. These roads form an integrated network of primary routes, and are designed and managed for mobility and efficiency.

COLLECTOR ROAD Those roads which provide service to smaller areas, usually 2,000 - 20,000 acres. They connect arterial routes and are designed and managed for multi-resource needs and travel efficiency.

LOCAL ROAD A facility located and designed to accommodate a specific resource activity rather than provide travel efficiency. Availability may be constant or intermittent.

Forested Land – Land at least 10 percent occupied by forest trees of any size or formerly having had such tree cover and not currently developed for non-forest use.

Forest Plan – See “Land and Resource Management Plan.”

Forest Structure (Stand Structure) – The horizontal and vertical distribution of components of a forest stand including the height, diameter, crown layers, and stems of trees, shrubs, herbaceous understory, snags and down woody debris.

Forest Supervisor – The official responsible for administering the Black Hills National Forest. The Forest Supervisor reports to the Regional Forester.

G

Game Species – Any species of wildlife or fish for which seasons and bag limits have been prescribed and which are normally harvested by hunters, trappers, and fishermen under state or Federal laws, codes, and regulations.

Geographic Information System (GIS) – Information processing computer technology to input, store, manipulate, analyze, and display earth-referenced spatial resource data in a map base format. GIS has two main components, the first being a database, and the second being a display of data, both numerically, and spatially in map format.

Goal – A concise statement that describes a desired condition to be achieved sometime in the future. It is normally expressed in broad, general terms and is timeless in that it has no specific date by which it is to be completed. Goal statements form the principal basis from which objectives are developed.

H

Habitat – The place where a plant or animal naturally or normally lives or grows.

Heritage Resource – The remains of sites, structures, or objects used by humans in the past – historical or archaeological.

Hiding Cover – Vegetation capable of hiding 90 percent of a standing adult deer or elk from the view of a human at a distance equal to or less than 200 feet.

Hydrophobic Soils (water repellent soils) – A condition where soils are literally “afraid of water” resulting from the exposure to very intensive heating during a wildfire (temperatures may reach over 1,500 degrees F at the soil surface and drop rapidly to temperatures less than 400 degrees F four inches below the soil surface). After a fire sweeps through an area and organic particles are heated to such an extent (vaporized) that as these gases cool and condense, they are chemically bonded to the soil mineral particles and are rendered extremely water repellent with varying thickness of hydrophobic soils remaining.

I

Imminently Dead Trees – Trees with greater than 75 percent crown scorch, or 50 percent bole damage or heavily infested with beetles.

Indicator (for issues) – The index or measure chosen by the interdisciplinary team to evaluate the consequences of the proposed action and alternatives relative to the identified issues.

Indicator Species – See “management indicator species.”

Interdisciplinary Team (IDT) – A group of individuals with different specialized training assembled to solve a problem or perform a task. The team is assembled out of recognition that no one discipline is sufficiently broad to adequately solve the problem. Through interaction, participants bring different points of view and a broader range of experience to bear on the problem.

Intermittent Streams – A stream which flows only at certain times of the year when it receives water from springs or from some surface source such as melting snow in mountainous areas.

Irretrievable – Applies to losses of production or use of renewable natural resources for a period of time.

Irreversible – Decisions causing changes that cannot be reversed. Irreversible commitments often apply to non-renewable resources, such as minerals and heritage resources.

Issue – A point, matter or question of public discussion or interest to be addressed or decided through the planning process.

L

Land and Resource Management Plan – A plan developed to meet the requirements of the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended, that guides all natural resource management activities and establishes management standards and guidelines for the National Forest Systems lands of a given National Forest.

Landing – any place where round timber is assembled for further transport, commonly with a change of method.

LANDSAT™ (land satellite) – One of a series of US satellites designed to transmit multispectral images of portions of the earth's surface to ground stations. The current Landsat Thematic Mapper sensor has seven broad wave bands and a spatial resolution of 30 meters or 98 feet.

Late Succession – Ecosystems distinguished by old trees and related structural features. This term encompasses the later stages of stand development that typically differ from earlier stages in structure, composition, function and other attributes.

There are two types of late succession ponderosa pine defined for the Black Hills. The first type, open-canopy late succession ponderosa pine, occurs where periodic, low-intensity fires have been part of the ecosystem. These late successional stands would consist of clumps or groups of trees with grasses in the openings between the clumps. They would contain large old trees with open branches, irregular and flattened crowns. The clumps or groups of trees would contain little down dead material and few small trees.

The second type, closed-canopy late succession ponderosa pine occurs where periodic, low-intensity high-frequency fires have not been a significant part of the ecosystem. These stands would contain large old trees with open branches and irregular crowns. The stands would have multiple canopy layers made up of various-aged trees. They would be well stocked with trees and contain standing dead and down trees.

M

Management Area – An area of land with similar management goals and a common management prescription.

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 – A plant or animal species selected in a planning process that are used to monitor the effects of planned management activities on populations of wildlife and fish, including those that are socially or economically important.

Fanny Project Area
DRAFT Environmental Assessment

Mbf – Thousand Board Feet, a measure of wood volume.

MMbf – Million Board Feet, a measure of wood volume.

Mineral Soil – Weathered rock materials without any vegetative cover.

Mitigation – Actions to avoid, minimize, reduce, eliminate, or rectify the impact of a management practice.

Monitoring and Evaluation – The periodic evaluation on a sample basis of Forest Plan management practices to determine how well objectives have been met and how closely management standards have been applied.

Motorized Trail Use – Use of trails by motorized 2-wheeled vehicles such as trail bikes or scooters, or 3- or 4-wheeled vehicles such as ATV's or quad runners, or snowmobiles.

N

National Environmental Policy Act (NEPA) – An Act to declare a National policy which will encourage productive and enjoyable harmony between man and his environment, to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of people, to enrich the understanding of the ecological systems and natural resources important to the Nation and to establish a Council on Environmental Quality.

National Forest Management Act (NFMA) – A law passed in 1976 as an amendment to the Forest and Rangeland Renewable Resources Planning act requiring the preparation of Regional Guides and Forest Plans and the preparation of regulations to guide that development.

National Register of Historic Places – A listing (maintained by the U.S. National Park Service) of areas, which have been designated as being of historical significance. The Register includes places of local and state significance as well as those of value to the Nation.

Natural Regeneration – Reforestation of a site by natural means without seeding or planting done by people. The new crop is grown from self-sown seed or by vegetative means, such as root suckers. In burned areas, natural seed would come from trees killed by fire, or by the surviving live trees.

Non-Forest Land – Lands never having or incapable of having greater than 10 percent of the area occupied by forest trees, and lands formerly forested and currently developed for non-forest use.

Non-Game – Species of animals, which are not managed for sport hunting resource.

Fanny Project Area

DRAFT Environmental Assessment

Notice of Intent – A notice in the Federal Register of intent to prepare an Environmental Impact Statement on a proposed action.

Noxious Weed – An officially designated plant species that is undesirable, conflicts, restricts, or otherwise causes problems with management objectives.

Nutrient Cycling (recycling) – Circulation or exchange of elements such as nitrogen and carbon between nonliving and living portions of the environment. Includes all mineral and nutrient cycles involving mammals and vegetation.

O

Objective – A concise, time-specific statement of measurable planned results that respond to pre-established goals. An objective forms the basis for further planning to define the precise steps to be taken and the resources to be used in achieving identified goals.

Old-Growth – See “Late Succession.”

Opportunity – A statement of general actions, measures, or treatments that addresses a public issue or management concern in a favorable way.

Optimum – A level of production that is consistent with other resource requirements as constrained by environmental, social, and economically sound conditions.

Overstory – That portion of the trees, in a forest or stand of more than one story, forming the upper or upper-most canopy layer.

P

Perennial Stream – A stream that has running water on a year-round basis under normal climatic conditions.

Post-Fledging Family Area (PFA) – Area (approximately 420 acres surrounding the nesting habitat) used by the adult and young from the time the young leave the nest until they are no longer dependent on the adult for food, generally surrounds the nest area (Renyolds, 1992).

Pole-Sized – Trees of at least five inches DBH, but smaller than the minimum utilization standard for sawtimber.

Prescribed Fire – A wildland fire burning under specified conditions, which will accomplish certain planned objectives. The fire may result from either planned or unplanned ignitions.

Fanny Project Area

DRAFT Environmental Assessment

Prescription – Management practices selected and scheduled for application on a designated area to attain specific goals and objectives.

Project File – The report, correspondence and meeting notes that were part of the planning and evaluation process leading up the selection of an alternative within the range of alternatives presented in the EIS.

Proposed Action – In terms of NEPA, the project, activity, or decision that a Federal agency intends to implement or undertake.

Public Participation – Meetings, conferences, seminars, workshops, tours, written comments, responses to survey questionnaires, and similar activities designed and held to obtain comments from the public about Forest Service planning.

R

Range – Land producing native forage for animal consumption and lands that are re-vegetated naturally or artificially to provide forage cover that is managed like native vegetation.

Ranger District – Administrative subdivisions of the Forest supervised by a District Ranger who reports to the Forest Supervisor.

Record of Decision – A document separate from but, associated with an Environmental Impact Statement that publicly and officially discloses the responsible official's decision on which alternative assessed in the Environmental Impact Statement to implement.

Recreation Opportunity – Availability of a real choice for a user to participate in a preferred activity within a preferred setting, in order to realize those satisfying experiences which are desired.

Recruitment – The addition to a population from all causes (i.e., reproduction, immigration, and stocking). Recruitment may refer literally to numbers born or hatched or to numbers at a specified stage of life such as breeding age or weaning age.

Reforestation – The natural or artificial restocking of an area with forest trees.

Regeneration – The renewal of a tree crop, whether by natural or artificial means. Also, the young crop itself, which commonly is referred to as reproduction.

Regulations – Generally refers to the Code of Federal Regulations, Title 36, Chapter II, which covers management of the Forest Service.

Research Natural Areas – An area in as near a natural condition as possible, which exemplifies typical or unique vegetation and associated biotic, soil, geologic, and aquatic features. The area is set aside to preserve a representative sample of an ecological

Fanny Project Area

DRAFT Environmental Assessment

community primarily for scientific and educational purposes; commercial and general public use is not allowed.

Responsible Official – The Forest Service employee who has been delegated the authority to make a specific decision.

Resource Information System – A database containing resource information.

Riparian Area – The moist transition zone between the aquatic ecosystem and the relatively drier, more upland, terrestrial ecosystem(s). This transition zone can extend both laterally and longitudinally away from aquatic ecosystems, sometimes into headwater swales that have no defined stream channel. The riparian ecosystem is the area whose soil is relatively more moist than the adjacent upland and whose vegetation growth reflects the greater accumulation of available water.

RIS – See Resource Information System.

Roadless Area Review and Evaluation II (RARE II) – The national inventory of roadless and undeveloped areas within the National Forest and Grasslands. This refers to the second such assessment, which was documented in the Final Environmental Impact Statement of the Roadless Area Review and Evaluation, January 1979.

Road Construction – The displacement of vegetation, soil and rock, and the installation of human-made structures involved in the process of building a complete, permanent road facility. The activities occur at a location, or corridor, that is not currently occupied by a road.

Road Reconditioning – Activities performed on an existing road or other facility to restore it to the standard it was constructed to.

Road Reconstruction – Construction activities performed on an existing facility. Reconstruction includes those activities that alter the facility from its originally constructed or subsequently reconstructed condition.

S

Salvage – The harvest of trees that are dead or dying because they have been materially damaged by fire, wind, insects, fungi or other injurious agents, before they lose economic value.

Sanitation – Intermediate harvest made to remove dead, damaged, or susceptible trees to prevent the spread of pests or pathogens and so promote the health of timber stands.

Sapling – A young tree larger than a seedling but smaller than a pole. Size is within the range of 1.0 to 4.9 inches DBH.

Fanny Project Area

DRAFT Environmental Assessment

Scenic Integrity (Existing or Objective) - State of naturalness or, conversely, the state of disturbance created by human activities or alteration. Integrity is stated in degrees of deviation from the existing landscape character in a national forest. It is the measure of the degree to which a landscape is visually perceived to be complete. The highest scenic integrity ratings are given to those landscapes, which have little or no deviation from the character valued by constituents for its aesthetic appeal. Scenic integrity is used to describe an existing situation, standard for management, or desired future conditions.

- **Very High:** A scenic integrity level that generally provides for ecological change only.
- **High:** A scenic integrity level meaning human activities are not visually evident. In high scenic integrity areas, activities may only repeat attributes of form, line, color, and texture found in the existing landscape character.
- **Moderate:** A scenic integrity level that refers to landscapes where the valued landscape character “appears slightly altered.” Noticeable deviations must remain visually subordinate to the landscape character being viewed.
- **Low:** A scenic integrity referring to the landscapes where the valued landscape character “appears moderately altered”. Deviations begin to dominate the valued landscape character being viewed but they borrow valued attributes such as size, shape, effect, and pattern of natural opening, vegetative type changes or architectural styles within or outside the landscape being viewed. They should not only appear as valued character outside the landscape being viewed but compatible or complimentary to the character within.
- **Very Low:** A scenic integrity level that refers to landscapes where the valued landscape character “appears heavily altered”. Deviations may strongly dominate the valued landscape character. They may not borrow from valued attributes such as size, shape, edge effect, and pattern of natural openings, vegetative type changes or architectural styles within or outside the landscape being viewed. However, deviations must be shaped and blended with the natural terrain so that elements such as unnatural edges, roads, landings, and structures do not dominate the composition.
- **Unacceptable Low:** A scenic integrity level that refers to landscapes where the valued landscape character being viewed appears extremely altered. Deviations are extremely dominant and borrow little if any line, form, color, texture, pattern or scale from the landscape character. Landscapes at this level of integrity need rehabilitation. This level should only be used to inventory existing integrity. It must not be used as a management objective.

Scoping Process – The public land management activities used to determine the range of actions, alternatives, and impacts to be considered in an Environmental Impact Statement.

Fanny Project Area
DRAFT Environmental Assessment

Sediment – Material suspended in water or that has been deposited in streams and lakes.

Seedling – A young tree less than 0.9 inches DBH.

Sensitive Species – Those plant and animal species identified by the 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.

Seral Condition – The unique characteristics of a biotic community, which is a developmental, transitory stage in an orderly ecologic succession involving changes in species, structure, and community processes with time.

Seral Species – A Species that will be replaced in the successional process.

Seral Stages – The series of relatively transitory plant communities that develop during ecological succession from bare ground to the climax stage.

Silviculture – The art and science of growing and tending forest vegetation, i.e., controlling the establishment, composition, and growth of forests for specific management goals.

Site Productivity – Production capability of specific areas of land.

Slash – The residue left on the ground after timber cutting and/or accumulating there as a result of storm, fire, or other damage. It includes unused logs, uprooted stumps, broken or uprooted stems, branches, twigs, leaves, bark and chips.

Small Game – Birds and small mammals normally hunted or trapped.

Snag – A standing dead tree or standing portion from which at least the leaves and smaller branches have fallen.

Snag Dependent Species – Animals whose long-term existence requires the presence of standing dead trees.

Soil Compaction – A physical change in soil properties that results in a decrease in porosity and an increase in soil-bulk density and strength.

Soil Erosion – The detachment and movement of soil from the land surface by water or wind. Accelerated erosion is much more rapid than normal, natural or geologic erosion, primarily as a result of the influence of activities of man, animals or natural catastrophes. Soil erosion and sediment are not the same (see “Sediment”).

Fanny Project Area

DRAFT Environmental Assessment

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.

Stand (Tree Stand) – A contiguous group of trees sufficiently uniform in age-class distribution, composition, and structure, and growing on a site of sufficiently uniform quality to be a distinguishable unit.

Stand Exams – Vegetation and site surveys used to collect data on forest stands. These surveys are sometimes referred to as Stage II inventories.

Standard – A principle specifying conditions or levels to be achieved.

Stand Replacement Fire – Synonymous with “stand destroying fire” and “ecologically significant fire” which is defined as: A high intensity surface fire or crown fire which kills most of the existing vegetation and provides a set of conditions, including consumption of large woody surface fuels and removal of the entire duff layer over much of the area affected by the fire (Crane and Fischer, 1986), exposing the seedbed, opening of closed cones and stimulation of sprouting species which leads to replacement of the pre-fire vegetation (Kilgore, 1978), and largely determines development of future stand density, age structure, and species composition (Brown, 1975).

Stocking (Tree or Stand Stocking) – A qualitative measure of density when compared to a management objective or standard; i.e., under-stocked, well stocked, overstocked, etc.

Stream – A watercourse having a distinct natural bed and banks; a permanent source which provides water at least periodically; and at least periodic or seasonal flows at times when other recognized streams in the same area are flowing.

Structural Stage – Any of several developmental stages of tree stands described in terms of tree size and the extent of canopy closure they create. They include:

Structural Stage 1 (Grass/Forb): An early forest successional stage during which grasses and forbs are the dominant vegetation. At the RIS site level, Structural Stage I is defined as non-stocked, with an average maximum density less than 10 percent. Small-scale Structural Stage I within RIS sites are at least one acre in size, do not meet the seedling stocking criteria and contain no saplings, poles or mature trees.

Structural Stage 2 (Shrubs/Seedlings): Developmental stage dominated by tree seedlings (less than one inch DBH) and shrub species.

Structural Stage 3 (Sapling/Pole): Developmental stage dominated by young trees 1 to 7 inches DBH, 10 to 50 feet tall and usually less than 50 years old. This

Fanny Project Area
DRAFT Environmental Assessment

stage is subdivided into three canopy closure classes: A (less than 40 percent), B (40 to 70 percent), and C (greater than 70 percent).

Structural Stage 4 (Mature): Consists of trees larger and older than Structural Stage 3. (Also classified by the same canopy closure categories as Structural Stage 3.)

Structural Stage 5 (Old Growth): This structural Stage is characterized by trees 160 years of age or older.

Succession – The replacement of one plant community by another, developing toward climax.

Successional stage – The relatively transitory communities that replace one another during development toward a potential natural community.

Suitability – The appropriateness of applying certain resource management practices to a particular area of land, as determined by an analysis of the economic and environmental consequences and the alternative uses foregone. A unit of land may be suited for a variety of individual or combined management practices.

Suited Timberlands – Land for which technology is available that will ensure timber production without irreversible resource damage to soils, productivity, or watershed conditions. There is reasonable assurance that such lands can be adequately restocked as provided in 36 CFR 219.13(h)(3).

T

Thermal Cover – Cover used by animals to ameliorate effects of weather. Optimally, thermal cover is provided by a stand of coniferous trees, 30 to 60 acres in size, at least 40 tall, with a canopy cover of at least 70 percent.

Threatened Species – Any species likely to become endangered within the foreseeable future throughout all, or a significant portion of, its range and those species that have been designated in the Federal Register by the Secretary of Interior as such.

Tiering – Refers to the coverage of general matters in broader Environmental Impact Statements (such as National program or policy statements) with subsequent narrower statements or environmental analyses (such as Regional program statements or ultimately site-specific statements) incorporating, by reference, the general discussions and concentrating solely on the issues specific to the statement subsequently prepared.

Tractor Logging – Any logging method, which uses a tractor, either mounted on crawler tracks or wheels, as the motive power for transporting logs from the stumps to a collecting point, whether by dragging or carrying the logs.

Fanny Project Area
DRAFT Environmental Assessment

Treatment Area – Area on which management, like timber harvesting or prescribed burning, occurs.

U

Understory – The lowest layer of vegetation in a forest or shrub community composed of grass, forbs, shrubs and trees usually less than 10 feet tall; vegetation growing under the tree canopy.

Unsuited Forest Lands – Forest land that is not managed for timber production because: (1) the land has been withdrawn by Congress, the Secretary of Agriculture, or Chief of the Forest Service; (2) technology is not available to prevent irreversible damage to soils, productivity, or watershed conditions; (3) there is no reasonable assurance that lands can be adequately restocked within five years after final harvest based on existing technology and knowledge; (4) there is presently a lack of adequate information or responses to timber management activities; or (5) timber management is inconsistent with or not cost efficient in meeting the management requirements and multiple-use objectives specified in the Forest Plan.

V

Vegetation Structural Stages – A generalized description of forest growth and aging stages based on the majority of the trees in the specific diameter distributions of the stand. For the goshawk balance of structural stages for the Phase I Amendment, six growth and aging stages were identified:

Stage	DBH range (inches)	Description
1	0-1	Grass/forb stage
2	1-5	Seedling/sapling
3	5-9	Young forest
4	9-14	Mid-aged forest
5	14-20	Mature forest
6	20+	Old forest

Viable Populations – 36 CFR 219.19 defines a viable population for planning purposes as one that has the estimated numbers and distribution of reproductive individuals to insure that a continued viable population is well distributed in the planning area.

W

Water Yield – (1) The runoff from a watershed, including groundwater outflow. (2) The measured output of water, usually measured in acre-feet. This water does not necessarily leave the watershed.

Watershed – The area of land, bounded by a divide, that drains water, sediment and dissolved materials to a common outlet at some point along a stream channel.

Wetlands – Areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances, does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction.

Y

Yarding – Hauling timber from the stump to a collection point.