

1 Appendix A. Glossary of Terms

2 **Administrative unit** ~ A national forest, a national grassland, a purchase unit, a land utilization
3 project, Columbia River Gorge National Scenic Area, Land between the Lakes, Lake Tahoe Basin
4 Management Unit, Midwin National Tallgrass Prairie, or other comparable unit of the National
5 Forest System (36 CFR 212.1, 36 CFR 261.2).

6 **All-terrain vehicle (ATV)** ~ A type of off-highway vehicle that travels on three or more low-
7 pressure tires; has handle-bar steering; is less than or equal to 50 inches in width; and has a seat
8 designed to be straddled by the operator (FSH 2309.18.05).

9 **Anthropogenic** ~ Human caused.

10 **Annual maintenance** ~ Work performed to maintain serviceability or repair failures during the year
11 in which they occur. Includes preventive and/or cyclic maintenance performed in the year in which it
12 is scheduled to occur. Unscheduled or catastrophic failures of components or assets may need to be
13 repaired as a part of annual maintenance (Financial Health–Common Definitions for Maintenance
14 and Construction Terms, July 22, 1998).

15 **Assessment** ~ For the purposes of forest plan revision, an assessment is the identification and
16 evaluation of existing information to support land management planning. Assessments are not
17 decision-making documents but provide current information on select topics relevant to the plan area
18 in the context of the broader landscape.

19 **Basal area** ~ The total cross-sectional area of trees in a stand measured at 4.5 feet (see below). For
20 example, 200 6-inch-diameter trees and 50 12-inch-diameter trees have a combined basal area of
21 about 79 square feet.



23 **Figure A-1. Diagram of basal area (left), basal area of 40 ft²/acre (center), basal area of 120 ft²/acre (right)**

24 *Note:* Diagram courtesy of D.R. Larsen [<http://oak.snrc.missouri.edu/nr3110/topics/basalarea.php>]. Photos courtesy of
25 <http://www.wkolsen.com>.

1 **Table A-1. Relationship between tree diameter, tree density, tree spacing, and basal area¹**

Tree Diameter (DBH) ²	Tree Density (trees/acre)	Tree Spacing (feet) (average distance between trees)	Basal Area (ft ² /acre)
6	204	15	40
12	51	29	40
18	23	44	40
6	612	8	120
12	153	17	120
18	68	25	120

2 ¹ Density, spacing, and basal area numbers rounded to nearest integer.

3 ² Diameter measured at breast height (4.5 feet).

4 **Best management practices (BMPs)** ~ Practical and economically achievable methods used in land
 5 management for protecting the environment. BMPs exist in mining to protect water, in forestry to
 6 protect soil, in reclamation to prevent the introduction of noxious weeds, for example. In water
 7 quality, BMPs: (1) are defined as methods, measures, or practices selected by an agency to meet its
 8 nonpoint source control needs; (2) include, but are not limited to, structural and nonstructural
 9 controls and operation and maintenance procedures; and (3) can be applied before, during, and after
 10 pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving
 11 waters.

12 **Bole** ~ The main stem of a tree (compare crown).

13 **Candidate species** ~ (1) For U.S. Fish and Wildlife Service candidate species, a species for which
 14 the Service possesses sufficient information on vulnerability and threats to support a proposal to list
 15 as endangered or threatened, but for which no proposed rule has yet been published by the Service.
 16 (2) For National Marine Fisheries Service candidate species, a species that is: (i) The subject of a
 17 petition to list and for which the National Marine Fisheries Service has determined that listing maybe
 18 warranted, pursuant to section 4(b)(3)(A) of the Endangered Species Act (16 U.S.C. 1533(b)(3)(A)),
 19 or (ii) Not the subject of a petition but for which the National Marine Fisheries Service has
 20 announced in the Federal Register the initiation of a status review.

21 **Carbon sequestration** ~ The ability of a plant to remove carbon dioxide from the atmosphere and
 22 convert it to carbohydrates through photosynthesis and store it in the plant (leaves, stems, roots).
 23 Forests are by far the best land cover for storing carbon since a high percentage of wood fiber is
 24 made up of carbon.

25 **Carbon stock** ~ Carbon stored in the ecosystem—in living biomass, soil, dead wood, and litter (see
 26 carbon sequestration). For purposes of carbon assessment for National Forest System (NFS) land
 27 management planning, carbon in fossil fuel resources, lakes or rivers, emissions from agency
 28 operations, or public use of NFS lands (such as emissions from vehicles and facilities) is not
 29 included.

30 **Collaboration or collaborative process** ~ A structured manner in which a collection of people with
 31 diverse interests shares knowledge, ideas, and resources while working together in an inclusive and
 32 cooperative manner toward a common purpose. Collaboration, in the context of forest planning, falls
 33 within the full spectrum of public engagement described in the Council on Environmental Quality’s
 34 publication of October, 2007: Collaboration in NEPA—A Handbook for NEPA Practitioners.

- 1 **Connectivity** ~ ecological conditions that exist at several spatial and temporal scales that provide
2 landscape linkages that permit the exchange of flow, sediments, and nutrients; the daily and seasonal
3 movements of animals within home ranges; the dispersal and genetic interchange between
4 populations; and the long distance range shifts of species, such as in response to climate change.
- 5 **Conservation** ~ The protection, preservation, management, or restoration of natural environments,
6 ecological communities, and species.
- 7 **Conserve** ~ For purposes of Planning Rule § 219.9, to protect, preserve, manage, or restore natural
8 environments and ecological communities to potentially avoid federally listing of proposed species
9 and candidate species.
- 10 **Crown** ~ The upper portion of a shrub or tree (compare bole).
- 11 **Culmination of mean annual increment of growth** ~ See “mean annual increment of growth.”
- 12 **Cultural Resources:** An object or definite location of human activity, occupation, or use identifiable
13 through field survey, historical documentation, or oral evidence. Cultural resources are prehistoric,
14 historic, archaeological, or architectural sites, structures, places, or objects and traditional cultural
15 properties. Cultural resources include the entire spectrum of resources for which the Forest Service is
16 responsible from artifacts to cultural landscapes without regard to eligibility for listing on the
17 National Register of Historic Places (FSM 2360.5).
- 18 **Cyclic maintenance** ~ Preventive maintenance activities that recur on a periodic and scheduled
19 cycle (Financial Health–Common Definitions for Maintenance and Construction Terms, July 22,
20 1998).
- 21 **Decommission** ~ Demolition, dismantling, removal, obliteration and/or disposal of a deteriorated or
22 otherwise unneeded asset or component, including necessary restoration and cleanup work.
- 23 **Designated area** ~ An area or feature identified and managed to maintain its unique special
24 character or purpose. Some categories of designated areas may be designated only by statute and
25 some categories may be established administratively in the land management planning process or by
26 other administrative processes of the Federal executive branch. Examples of statutorily designated
27 areas are national heritage areas, national recreational areas, national scenic trails, wild and scenic
28 rivers, wilderness areas, and wilderness study areas. Examples of administratively designated areas
29 are experimental forests, research natural areas, scenic byways, botanical areas, and significant
30 caves.
- 31 **Decision memo** ~ A concise written record of the responsible official’s decision to implement an
32 action that is categorically excluded from further analysis and documentation in an environmental
33 impact statement or environmental assessment, where the action is one of a category of actions
34 which do not individually or cumulatively have a significant effect on the human environment, and
35 does not give rise to extraordinary circumstances in which a normally excluded action may have a
36 significant environmental effect.
- 37 **Deferred maintenance** ~ Maintenance that was not performed when it should have been or when it
38 was scheduled and which, therefore, was put off or delayed for a future period. When allowed to
39 accumulate without limits or consideration of useful life, deferred maintenance leads to deterioration
40 of performance, increased costs to repair, and decrease in asset value. Deferred maintenance needs
41 may be categorized as critical or non-critical at any point in time. Continued deferral of non-critical
42 maintenance will normally result in an increase in critical deferred maintenance. Code compliance

1 (e.g., life safety, ADA, OSHA, environmental, etc.), Forest plan direction, best management
2 practices, biological evaluations other regulatory or Executive order compliance requirements, or
3 applicable standards not met on schedule are considered deferred maintenance (Financial Health–
4 Common Definitions for Maintenance and Construction Terms, July 22, 1998).

5 **Designated road, trail, or area** ~ A National Forest System road, a National Forest System trail, or
6 an area on National Forest System lands that is designated for motor vehicle use pursuant to 36 CFR
7 212.51 on a motor vehicle use map (36 CFR 212.1).

8 **Disturbance** ~ Any relatively discrete event in time that disrupts ecosystem, watershed, community,
9 or species population structure or function and changes resources, substrate availability, or the
10 physical environment.

11 **Disturbance regime** ~ A description of the characteristic types of disturbance on a given landscape;
12 the frequency, severity, and size distribution of these characteristic disturbance types and their
13 interactions.

14 **Easement** ~ A type of special use authorization (usually granted for linear rights-of-way) that is
15 utilized in those situations where a conveyance of a limited and transferable interest in National
16 Forest System land is necessary or desirable to serve or facilitate authorized long-term uses, and that
17 may be compensable according to its terms (36 CFR 251.51).

18 **Ecological conditions** ~ The biological and physical environment that can affect the diversity of
19 plant and animal communities, the persistence of native species, and the productive capacity of
20 ecological system. Ecological conditions include habitat and other influences on species and the
21 environment. Examples of ecological conditions include the abundance and distribution of aquatic
22 and terrestrial habitats, connectivity, roads and other structural developments, human uses, and
23 invasive species.

24 **Ecological integrity** ~ The quality or condition of an ecosystem when its dominant ecological
25 characteristics (for example, composition, structure, function, connectivity, and species composition
26 and diversity) occur within the natural range of variation and can withstand and recover from most
27 perturbations imposed by natural environmental dynamics or human influence.

28 **Ecological response unit (ERU)** ~ A unit of land that is homogenous in character such that similar
29 units will respond in the same way to disturbance or manipulation (Society for Range Management
30 1998). ERUs represent an ecosystem stratification based on vegetation characteristics that would
31 occur when natural disturbance regime and biological processes prevail and combine potential
32 vegetation and historic fire regimes to form ecosystem classes useful for landscape assessment.

33 **Ecological sustainability** ~ See “sustainability.”

34 **Ecological system** ~ See “ecosystem.”

35 **Economic sustainability** ~ See “sustainability.”

36 **Ecosystem** ~ A spatially explicit, relatively homogeneous unit of the Earth that includes all
37 interacting organisms and elements of the abiotic environment within its boundaries. An ecosystem
38 is commonly described in terms of its: (1) Composition—the biological elements within the different
39 levels of biological organization, from genes and species to communities and ecosystems; (2)
40 Structure—the organization and physical arrangement of biological elements such as snags and down
41 woody debris, vertical and horizontal distribution of vegetation, stream habitat complexity, landscape

1 pattern, and connectivity; (3) Function—ecological processes that sustain composition and structure,
2 such as energy flow, nutrient cycling and retention, soil development and retention, predation and
3 herbivory, and natural disturbances such as wind, fire, and floods; and (4) Connectivity (see
4 “connectivity”).

5 **Ecosystem diversity** ~ The variety and relative extent of ecosystems.

6 **Ecosystem services** ~ Benefits people obtain from ecosystems, including: (1) provisioning services,
7 such as clean air and fresh water, energy, fuel, forage, fiber, and minerals; (2) regulating services,
8 such as long-term storage of carbon; climate regulation; water filtration, purification, and storage;
9 soil stabilization; flood control; and disease regulation; (3) supporting services, such as pollination,
10 seed dispersal, soil formation, and nutrient cycling; and (4) cultural services, such as educational,
11 aesthetic, spiritual and cultural heritage values, recreational experiences and tourism opportunities.

12 **Ecotone** ~ A transition area between two ecosystems.

13 **Environmental assessment (EA)** ~ A public document that provides sufficient evidence and
14 analysis for determining whether to prepare an environmental impact statement or a finding of no
15 significant impact, aids an agency’s compliance with the National Environmental Policy Act (NEPA)
16 when no environmental impact statement is necessary, and facilitates preparation of a statement
17 when one is necessary (40 CFR 1508.9; FSH 1909.15, chapter 40).

18 **Environmental document** ~ For the purposes of this part: an environmental assessment,
19 environmental impact statement, finding of no significant impact, categorical exclusion, and notice
20 of intent to prepare an environmental impact statement.

21 **Environmental impact statement (EIS)** ~ A detailed written statement as required by section
22 102(2)(C) of the National Environmental Policy Act (NEPA) of 1969 (40 CFR 1508.11; 36 CFR
23 220).

24 **Even-aged stand** ~ A stand of trees composed of a single age-class (compare uneven-aged stand).

25 **Federally recognized Indian Tribe** ~ An Indian or Alaska Native Tribe, band, nation, pueblo,
26 village, or community that the Secretary of the Interior acknowledges to exist as an Indian Tribe
27 under the Federally Recognized Indian Tribe List Act of 1994 (25 U.S.C. 479a).

28 **Federally recognized species** ~ Those species that have been determined by the U.S. Fish and
29 Wildlife Service and the National Oceanic and Atmospheric Administration to be endangered or
30 threatened per the Endangered Species Act, as amended (Public Law 93-205) or have been proposed
31 for listing or have been identified as candidates for listing.

32 **Focal species** ~ A small subset of species whose status permits inference to the integrity of the larger
33 ecological system to which it belongs and provides meaningful information regarding the
34 effectiveness of the plan in maintaining or restoring the ecological conditions to maintain the
35 diversity of plant and animal communities in the plan area. Focal species would be commonly
36 selected on the basis of their functional role in ecosystem.

37 **Forb** ~ An herbaceous dicotyledonous (“broadleaf”) plant. Forbs may be annual or perennial.
38 (Grasses are herbaceous monocotyledonous plants.)

39 **Forest (vegetation type)** ~ A tree-dominated plant community in which the dominant trees are
40 typically tall and straight-boled, often with overlapping crown (compare woodland).

- 1 **Forestland** ~ Land at least 10 percent occupied by forest trees of any size or formerly having had
2 such tree cover and not currently developed for non-forest uses. Lands developed for nonforest use
3 include areas for crops, improved pasture, residential or administrative areas, improved roads of any
4 width and adjoining road clearing, and power line clearings of any width.
- 5 **Forest road or trail** ~ A road or trail wholly or partly within or adjacent to and serving the National
6 Forest System that the Forest Service determines is necessary for the protection, administration and
7 utilization or the National Forest System and the use and development of its resources (36 CFR
8 212.1, 36 CFR 251.5, 36 CFR 261.2).
- 9 **Forest transportation system** ~ The system of National Forest System roads, National Forest
10 System Trails, and airfields on National Forest System lands (36 CFR 212.1).
- 11 **Formal comments** ~ See “substantive formal comments.”
- 12 **Fuel (fire and forestry)** ~ Live or dead vegetation that can carry a fire.
- 13 **Geographic area** ~ A spatially contiguous land area identified within the planning area. A
14 geographic area may overlap with a management area.
- 15 **Grassland** ~ A vegetation type dominated by grasses. Forbs are commonly present. Trees and shrubs
16 may be present as minor components of the plant community.
- 17 **Group** ~ A cluster of two or more trees with interlocking or nearly interlocking crowns at maturity
18 surrounded by grass-forb-shrub interspaces. Size of tree groups is typically variable depending on
19 forest type and site conditions and can range from fractions of an acre (e.g., a two-tree group), such
20 as in ponderosa pine or dry mixed-conifer forests, to many acres, as is common in wet mixed-conifer
21 and spruce fir forests. Trees within groups are typically non-uniformly spaced, some of which may
22 be tightly clumped.
- 23 **INFRA** ~ The Agency’s infrastructure database used to store and manage information related to
24 constructed features, such as buildings, dams, bridges, water systems, roads, trails, developed
25 recreation sites, range improvements, administrative sites, heritage sites, as well as general forest
26 areas and wilderness areas.
- 27 **Inherent capability of the plan area** ~ The ecological capacity or ecological potential of an area
28 characterized by the interrelationship of its physical elements, its climatic regime, and natural
29 disturbances.
- 30 **Integrated resource management** ~ Multiple-use management that recognizes the interdependence
31 of ecological resources and is based on the need for integrated consideration of ecological, social,
32 and economic factors.
- 33 **Interspace** ~ Area of relatively low-growing vegetation (or no vegetation) between patches of taller
34 vegetation.
- 35 **Ladder fuels** ~ Live or dead vegetation (tall grasses, shrubs, small trees) that allows flames to climb
36 up into the forest canopy.
- 37 **Land management plan** ~ A document or set of documents that provide management direction for
38 an administrative unit of the National Forest System developed under the requirements of this part or
39 a prior planning rule.

- 1 **Landscape** ~ A defined area irrespective of ownership or other artificial boundaries, such as a spatial
2 mosaic of terrestrial and aquatic ecosystem, landforms, and plant communities, repeated in similar
3 form throughout such a defined area.
- 4 **Lead objector** ~ For an objection submitted with multiple individuals, multiple entities, or
5 combination of individuals and entities listed, the individual or entity identified to represent all other
6 objectors for the purposes of communication, written or otherwise, regarding the objection.
- 7 **Line officer** ~ A Forest Service official who serves in a direct line of command from the Chief.
- 8 **Lop and Scatter** ~ Silvicultural practice of felling and disposing of unwanted material by cutting
9 into lengths and disturbing relatively evenly.
- 10 **Maintain** ~ In reference to an ecological condition: To keep in existence or continuance of the
11 desired ecological condition in terms of its desired composition, structure, and processes. Depending
12 upon the circumstance, ecological conditions may be maintained by active or passive management or
13 both.
- 14 **Maintenance** ~ The upkeep of the entire forest transportation facility including surface and
15 shoulders, parking and side areas, structures, and such traffic-control devices as are necessary for its
16 safe and efficient utilization (36 CFR 212.1).
- 17 **Management area** ~ A land area identified within the planning area that has the same set of
18 applicable plan components. A management area does not have to be spatially contiguous.
- 19 **Management system** ~ For purposes of the 2012 Planning Rule, a timber management system
20 including even-aged management and uneven-aged management.
- 21 **Mastication** ~ Mechanical grinding of slash, often left in place to aid soil health.
- 22 **Mean annual increment of growth and culmination of mean annual increment of growth** ~
23 Mean annual increment of growth is the total increment of increase of volume of a stand (standing
24 crop plus thinnings) up to a given age divided by that age. Culmination of mean annual increment of
25 growth is the age in the growth cycle of an even-aged stand at which the average annual rate of
26 increase of volume is at a maximum. In land management plans, mean annual increment is expressed
27 in cubic measure and is based on the expected growth of stands, according to intensities and
28 utilization guidelines in the plan.
- 29 **Monitoring** ~ A systematic process of collecting information to evaluate effects of actions or
30 changes in conditions or relationships.
- 31 **Motor vehicle** ~ Any vehicle which is self-propelled, other than (1) a vehicle operated on rails and
32 (2) any wheelchair or mobility device, including one that is battery-powered, that is designed solely
33 for use by a mobility-impaired person for locomotion, and that is suitable for use in an indoor
34 pedestrian area (36 CFR 212.1, 36 CFR 261.2).
- 35 **Motor vehicle use map (MVUM)** ~ A map reflecting designated roads, trails, and areas on an
36 administrative unit or a ranger district of the National Forest System (36 CFR 212.1).
- 37 **Multiple use** ~ The management of all the various renewable surface resources of the National
38 Forest System so that they are utilized in the combination that will best meet the needs of the
39 American people; making the most judicious use of the land for some or all of these resources or

1 related services over areas large enough to provide sufficient latitude for periodic adjustments in use
2 to conform to changing needs and conditions; that some land will be used for less than all of the
3 resources; and harmonious and coordinated management of the various resources, each with the
4 other, without impairment of the productivity of the land, with consideration being given to the
5 relative values of the various resources, and not necessarily the combination of uses that will give the
6 greatest dollar return or the greatest unit output, consistent with the Multiple-Use Sustained-Yield
7 Act of 1960 (16 U.S.C. 528–531).

8 **National Forest System (NFS)** ~ The National Forest System includes national forests, national
9 grasslands, and the National Tallgrass Prairie.

10 **National Forest System land** ~ All lands, waters, or interests therein administered by the Forest
11 Service (36 CFR 251.51).

12 **National Forest System road** ~ A forest road other than a road which has been authorized by a
13 legally documented right-of-way held by a State, county or other local public road authority (36 CFR
14 212.1, 36 CFR 251.51, 36 CFR 261.2).

15 **National Forest System trail** ~ A forest trail other than a trail which has been authorized by a
16 legally documented right-of-way held by a State, county or other local public road authority (36 CFR
17 212.1).

18 **Native knowledge** ~ A way of knowing or understanding the world, including traditional ecological
19 and social knowledge of the environment derived from multiple generations of indigenous peoples’
20 interactions, observations, and experiences with their ecological system. Native knowledge is place-
21 based and culture-based knowledge in which people learn to live in and adapt to their own
22 environment through interactions, observations, and experiences with their ecological system. This
23 knowledge is generally not solely gained, developed by, or retained by individuals, but is rather
24 accumulated over successive generations and is expressed through oral traditions, ceremonies,
25 stories, dances, songs, art, and other means within a cultural context.

26 **Native species** ~ An organism that was historically or is present in a particular ecosystem as a result
27 of natural migratory or evolutionary processes; and not as a result of an accidental or deliberate
28 introduction into that ecosystem. An organism’s presence and evolution (adaptation) in an area are
29 determined by climate, soil, and other biotic and abiotic factors.

30 **Natural range of variability and natural range of variation** ~ Spatial and temporal variation in
31 ecosystem characteristics under historic disturbance regime during a reference period. The reference
32 period considered should be sufficiently long to include the full range of variation produced by
33 dominant natural disturbance regimes, often several centuries, for such disturbances as fire and
34 flooding and should also include short-term variation and cycles in climate. “Natural range of
35 variation” (NRV) is a term used synonymously with historic range of variation or range of natural
36 variation. The NRV is a tool for assessing ecological integrity, and does not necessarily constitute a
37 management target or desired condition. The NRV can help identify key structural, functional,
38 compositional, and connectivity characteristics, for which plan components may be important for
39 either maintenance or restoration of such ecological conditions.

40 **NEPA** ~ The National Environmental Policy Act (NEPA) requires Federal agencies to integrate
41 environmental values into their decision making processes by considering the environmental impacts
42 of their proposed actions and reasonable alternatives to those actions.

- 1 **Newspaper(s) of record** ~ The newspaper(s) of record is (are) the principal newspaper(s) of general
2 circulation annually identified and published in the *Federal Register* by each regional forester to be
3 used for publishing notices as required by 36 CFR 215.5. The newspaper(s) of record for projects in
4 a plan area is (are) the newspaper(s) of record for notices related to planning.
- 5 **Objection** ~ The written document filed with a reviewing officer by an individual or entity seeking
6 pre-decisional administrative review of a plan, plan amendment, or plan revision.
- 7 **Objection period** ~ The allotted filing period following publication of a public notice in the
8 applicable newspaper of record (or the *Federal Register*, if the responsible official is the Chief) of
9 the availability of the appropriate environmental documents and draft decision document, including a
10 plan, plan amendment, or plan revision during which an objection may be filed with the reviewing
11 officer.
- 12 **Objection process** ~ Those procedures established for pre-decisional administrative review of a
13 plan, plan amendment, or plan revision.
- 14 **Objector** ~ An individual or entity who meets the requirements of § 219.53, and files an objection
15 that meets the requirements of §§ 219.54 and 219.56.
- 16 **Off-highway vehicle (OHV)** ~ Any motorized vehicle designed for or capable of cross county travel
17 on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain;
18 except that term excludes (A) any registered motorboat; (B) any fire, military, emergency or law
19 enforcement vehicle when used for emergency purposes, and any combat or combat support vehicle
20 when used for national defense purposes; and (C) any vehicle whose use is expressly authorized by
21 the respective agency head under a permit, lease, license, or contract (EO 116-44 as amended by EO
22 11989). See also FSM 2355. 01–Exhibit 01.
- 23 **Online** ~ Refers to the appropriate Forest Service website or future electronic equivalent.
- 24 **Open to public travel** ~ The road section is available, except during scheduled periods, extreme
25 weather or emergency conditions, passable by four-wheel standard passenger cars, and open to the
26 general public for use without restrictive gates, prohibitive signs, or regulation other than restrictions
27 based on size, weight, or class of registration. Toll plazas of public toll roads are not considered
28 restrictive gates (23 CFR 460.2).
- 29 **Overstory** ~ The uppermost layer of vegetation in a plant community (compare understory).
- 30 **Participation** ~ Activities that include a wide range of public involvement tools and processes, such
31 as collaboration, public meetings, open houses, workshops, and comment periods.
- 32 **Passenger cars** ~ These include passenger cars of all sizes, sport/utility vehicles, minivans, vans and
33 pickup trucks (AASHTO [2001], A Policy on Geometric Design of Highways and Streets).
- 34 **Patch** ~ Areas larger than tree groups in which the vegetation composition and structure are
35 relatively homogeneous. Patches can be composed of randomly arranged trees or multiple tree
36 groups, and they can be even-aged or uneven-aged. Patches comprise the mid-scale, ranging in size
37 from 10 to 1,000 acres. Patches and stands are roughly synonymous.
- 38 **Persistence** ~ Continued existence.
- 39 **Plan** ~ See “land management plan.”

- 1 **Plan area** ~ The National Forest System lands covered by a plan.
- 2 **Plant and animal community** ~ A naturally occurring assemblage of plant and animal species
3 living within a defined area or habitat.
- 4 **Private road** ~ A road under private ownership authorized by easement to a private party, or a road
5 which provides access pursuant to a reserved or private right (FS-643, Roads Analysis: Informing
6 Decisions About Managing the National Forest Transportation System, August 1999).
- 7 **Productivity** ~ The capacity of National Forest System lands and their ecological system to provide
8 the various renewable resources in certain amounts in perpetuity. For the purposes of this subpart,
9 productivity is an ecological term, not an economic term.
- 10 **Project** ~ An organized effort to achieve an outcome on National Forest System lands identified by
11 location, tasks, outputs, effects, times, and responsibilities for execution.
- 12 **Proposed species** ~ Any species of fish, wildlife, or plant that is proposed by the U.S. Fish and
13 Wildlife Service or the National Marine Fisheries Service in the *Federal Register* to be listed under
14 section 4 of the Endangered Species Act.
- 15 **Public agency** ~ Any organization with administrative or functional responsibilities which are
16 directly or indirectly affiliated with a governmental body of any nation, State, or local jurisdiction
17 (23 CFR 635.102).
- 18 **Public authority** ~ A Federal, State, county, town or township, Indian Tribe, municipal or other
19 local government or instrumentality thereof, with authority to finance, build, operate or maintain toll
20 or toll-free highway facilities (23 CFR 460.2).
- 21 **Public road** ~ Any road or street under the jurisdiction of and maintained by a public authority and
22 open to public travel (23 USC 101).
- 23 **Ramet** ~ An individual plant that is part of a clone.
- 24 **Recovery** ~ For the purposes of the 2012 Planning Rule, and with respect to threatened or
25 endangered species: The improvement in the status of a listed species to the point at which listing as
26 federally endangered or threatened is no longer appropriate.
- 27 **Recreation** ~ See “sustainable recreation.”
- 28 **Recreational vehicle (RV)** ~ These include motor homes, cars with camper trailers, cars with boat
29 trailers, motor homes with boat trailers and motor homes pulling cars. (AASHTO [2001], A Policy
30 on Geometric Design of Highways and Streets).
- 31 **Recreation opportunity** ~ An opportunity to participate in a specific recreation activity in a
32 particular recreation setting to enjoy desired recreation experiences and other benefits that accrue.
33 Recreation opportunities include non-motorized, motorized, developed, and dispersed recreation on
34 land, water, and in the air.
- 35 **Recreation setting** ~ The social, managerial, and physical attributes of a place that, when combined,
36 provide a distinct set of recreation opportunities. The Forest Service uses the recreation opportunity
37 spectrum to define recreation settings and categorize them into six distinct classes: “primitive,”
38 “semi-primitive non-motorized,” “semi-primitive motorized,” “roaded natural,” “rural,” and “urban.”

- 1 **Responsible official** ~ The official with the authority and responsibility to oversee the planning
2 process and to approve a plan, plan amendment, and plan revision.
- 3 **Restoration** ~ The process of assisting the recovery of an ecosystem that has been degraded,
4 damaged, or destroyed. Ecological restoration focuses on reestablishing the composition, structure,
5 pattern, and ecological processes necessary to facilitate terrestrial and aquatic ecosystems
6 sustainability, resilience, and health under current and future conditions.
- 7 **Restore** ~ To renew by the process of restoration (see “restoration”).
- 8 **Reviewing officer** ~ The USDA or Forest Service official having the delegated authority and
9 responsibility to review an objection filed on a plan or amendment.
- 10 **Right-of-way** ~ A privilege or right to cross over or use the land of another party for egress and
11 ingress such as roads, pipelines, irrigation canals, or ditches. The right-of-way may be conveyed by
12 an easement, permit, license, or other instrument (FSM 5460.5).
- 13 **Riparian (vegetation type)** ~ The plant community adjacent to a river, stream, or spring. Riparian
14 vegetation is typified by the presence of hydrophilic (water-loving) plants.
- 15 **Riparian areas** ~ Three-dimensional ecotones of interaction ~ that include terrestrial and aquatic
16 ecosystem that extend down into the groundwater, up above the canopy, outward across the
17 floodplain, up the near-slopes that drain to the water, laterally into the terrestrial ecosystem, and
18 along the water course at variable widths.
- 19 **Riparian management zone** ~ Portions of a watershed where riparian-dependent resources receive
20 primary emphasis, and for which plans include components to maintain or restore hydrologic and
21 ecological function.
- 22 **Risk** ~ A combination of the likelihood that a negative outcome will occur and the severity of the
23 subsequent negative consequences.
- 24 **Road** ~ A motor vehicle route over 50-inches wide, unless identified and managed as a trail (36 CFR
25 212.1).
- 26 **Road maintenance level (ML)** ~ The level of service provided by, and maintenance required for, a
27 specific road.
- 28 **ML 1** ~ Closed to vehicular traffic intermittently for periods that exceed 1 year. Can be operated
29 at any other maintenance level during periods of use.
- 30 **ML 2** ~ Open and maintained for use by high-clearance vehicles; surface smoothness is not a
31 consideration. Most have native material surface (not paved and no aggregate surface).
- 32 **ML 3** ~ Open and maintained for use by standard passenger cars. Most have gravel surface.
- 33 **ML 4** ~ Open and maintained for use by standard passenger cars and to provide a moderate
34 degree of user comfort and convenience at moderate travel speeds. Most are paved or have an
35 aggregate surface.
- 36 **ML 5** ~ Open and maintained for use by standard passenger cars and to provide a high degree of
37 user comfort and convenience. Most are paved.

- 1 **Routine maintenance** ~ Work that is planned to be accomplished on a continuing basis, generally
2 annually or more frequently (FSH 7709.58, 13.41).
- 3 **Scenic character** ~ A combination of the physical, biological, and cultural images that gives an area
4 its scenic identity and contributes to its sense of place. Scenic character provides a frame of reference
5 from which to determine scenic attractiveness and to measure scenic integrity.
- 6 **Seed tree** ~ A tree left standing for the sole or primary purpose of providing seed (SAF 2016).
- 7 **Seral stage** ~ See “succession.”
- 8 **Shelterwood** ~ The cutting of most trees, leaving enough large trees to produce seed and shade for a
9 new generation of trees (adapted from SAF [2016]). A shelterwood treatment leaves more large trees
10 after treatment than a seed-tree treatment.
- 11 **Shrubland** ~ A vegetation type dominated by shrubs. Grasses and forbs are commonly present.
12 Trees may be present as a minor component of the plant community.
- 13 **Slash** ~ Coarse and fine woody material generated during timber harvest, thinning, etc.
- 14 **Snag** ~ A standing, dead tree
- 15 **Social sustainability** ~ See “sustainability.”
- 16 **Sole source aquifer** ~ Underground water supply designated by the Environmental Protection
17 Agency (EPA) as the “sole or principle” source of drinking water for an area as established under
18 section 1424(e) of the Safe Drinking Water Act (42 U.S.C. 300h–3(e)).
- 19 **Source water protection areas** ~ The area delineated by a State or Tribe for a public water system
20 (PWS) or including numerous PWSs, whether the source is ground water or surface water or both, as
21 part of a State or Tribal source water assessment and protection program (SWAP) approved by
22 Environmental Protection Agency under section 1453 of the Safe Drinking Water Act (42 U.S.C.
23 300h–3(e)).
- 24 **Special use authorization** ~ A permit, term permit, lease, or easement which allows occupancy, use,
25 rights, or privileges of National Forest System land (36 CFR 251.51).
- 26 **Species of conservation concern** ~ A species, other than federally recognized threatened,
27 endangered, proposed species, or candidate species, that is known to occur in the plan area and for
28 which the regional forester has determined that the best available scientific information indicates
29 substantial concern about the species’ capability to persist over the long term in the plan area.
- 30 **Stressor** ~ For the purposes of the 2012 Planning Rule: A factor that may directly or indirectly
31 degrade or impair ecosystem composition, structure, or ecological process in a manner that may
32 impair its ecological integrity, such as an invasive species, loss of connectivity, or the disruption of a
33 natural disturbance regime.
- 34 **Substantive formal comments** ~ Written comments submitted to, or oral comments recorded by, the
35 responsible official or his designee during an opportunity for public participation provided during the
36 planning process (§§ 219.4 and 219.16), and attributed to the individual or entity providing them.
37 Comments are considered substantive when they are within the scope of the proposal, are specific to
38 the proposal, have a direct relationship to the proposal, and include supporting reasons for the
39 responsible official to consider.

1 **Succession** ~ Change in species composition and structure over time. Early successional stages
 2 (“seres” or “states”) are often dominated by small, short-lived, poorly competitive, non-woody
 3 species (annual forbs and grasses) that take advantage of the available “biological space” and
 4 plentiful soil nutrients and sunlight present after a disturbance. As succession proceeds, soil nutrients
 5 are converted into plant biomass, and plant community dominance generally shifts toward larger,
 6 longer-lived, woody species that are better competitors for limited soil nutrients and sunlight—
 7 shrubs, shade-intolerant tree species, and eventually, shade-tolerant tree species (Figure A-1).
 8 Disturbances like wildfire, drought, invasive species, and herbivory can interrupt or reverse
 9 succession.



10

11 **Figure A-2. Representation of the different seral stages in the succession of a forest**

12 **Sustainability** ~ The capability to meet the needs of the present generation without compromising
 13 the ability of future generations to meet their needs. For purposes of this part, “ecological
 14 sustainability” refers to the capability of ecosystem to maintain ecological integrity; “economic
 15 sustainability” refers to the capability of society to produce and consume or otherwise benefit from
 16 goods and services including contributions to jobs and market and nonmarket benefits; and “social
 17 sustainability” refers to the capability of society to support the network of relationships, traditions,
 18 culture, and activities that connect people to the land and to one another, and support vibrant
 19 communities.

20 **Sustainable recreation** ~ The set of recreation settings and opportunities on the National Forest
 21 System that is ecologically, economically, and socially sustainable for present and future generations.

22 **System driver** ~ A dominant ecological process, disturbance regime, or stressor, such as natural
 23 succession, wildland fire, invasive species, and climate change.

24 **Temporary road or trail** ~ A road or trail necessary for emergency operations or authorized by
 25 contract, permit, lease, or other written authorization that is not a forest road or trail and that is not
 26 included in a forest transportation atlas (36 CFR 212.1).

27 **Timber harvest** ~ The removal of trees for wood fiber and other multiple-use purposes.

- 1 **Timber production** ~ The purposeful growing, tending, harvesting, and regeneration of regulated
2 crops of trees to be cut into logs, bolts, or other round sections for industrial or consumer use.
- 3 **Traditional Cultural Property (TCP):** A historic property that is eligible for inclusion in the
4 National Register of Historic Places because of its association with cultural practices or beliefs of a
5 living community that 1) are rooted in that community's history, and 2) are important in maintaining
6 the continuing cultural identity of the community (NPS National Register Bulletin 38).
- 7 **Traditional Use:** Uses that maintain relationships between people and the world around them. Uses
8 that are rooted in the community's history and are important in maintaining the continuing cultural
9 identity of the community.
- 10 **Trail** ~ A route 50 inches or less in width or a route over 50-inches wide that is identified and
11 managed as a trail (36 CFR 212.1).
- 12 **Trailhead** ~ The transfer point between a trail and a road, lake, or airfield. The area may have
13 developments that facilitate the transfer from one transportation mode to another (FSM 2353.05).
- 14 **Transportation facility jurisdiction** ~ The legal right or authority to control, operate, regulate use
15 of, maintain, or cause to be maintained, a transportation facility, through ownership or delegated
16 authority. The authority to construct or maintain such a facility may be derived from fee title,
17 easement, written authorization, or permit from a Federal agency, or some similar method (23 CFR
18 660.103).
- 19 **Travel route** ~ A road, river or trail, that is open for use by members of the general public (36 CFR
20 292.21).
- 21 **Unauthorized road or trail** ~ A road or trail that is not a forest road or trail or a temporary road or
22 trail and that is not included in a forest transportation atlas (36 CFR 212.1).
- 23 **Understory** ~ The layer(s) of vegetation in a plant community beneath the overstory (compare
24 overstory).
- 25 **Uneven-aged stand** ~ A stand of trees composed of a single age-class (compare even-aged stand).
- 26 **Vehicle** ~ Any device in, upon, or by which any person or property is or may be transported,
27 including any frame, chassis, or body of any motor vehicle, except devices used exclusively upon
28 stationary rails or tracks (36 CFR 261.2).
- 29 **Viable population** ~ A population of a species that continues to persist over the long term with
30 sufficient distribution to be resilient and adaptable to stressors and likely future environments.
- 31 **Watershed** ~ A region or land area drained by a single stream, river, or drainage network; a drainage
32 basin.
- 33 **Watershed condition** ~ The state of a watershed based on physical and biogeochemical
34 characteristics and processes.
- 35 **Wild and scenic river** ~ A river designated by Congress as part of the National Wild and Scenic
36 Rivers System that was established in the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271
37 (note), 1271–1287).

- 1 **Wilderness** ~ Any area of land designated by Congress as part of the National Wilderness
2 Preservation System that was established in the Wilderness Act of 1964 (16 U.S.C. 1131–1136).
- 3 **Wildland** ~ Forests, shrublands, grasslands, and other vegetation communities that have not been
4 significantly modified by agriculture or human development.
- 5 **Wildland-urban interface (WUI)** ~ Place where development adjoins or intermingles with
6 undeveloped natural area (rural neighborhood, ski area, campground, etc.).
- 7 **Witch’s Broom** ~ Dense clump of deformed plant growth resulting from infection (such as by
8 mistletoe).
- 9 **Woodland** ~ A plant community in which the dominant trees are typically small and short-boled,
10 usually with little crown overlap (compare forest).