

## Glossary

**affected environment-** The natural environment that exists at the present time in an area being analyzed.

**allowable sale quantity (ASQ)-** The amount of timber expected to be sold within a certain time period from an area of suitable land. ASQs are usually stated to give the commercial timber industry an indication of the annual amount of commercial forest products that it can anticipate from federal lands.

**alternative** – A combination of management prescriptions applied in specific amounts and locations to achieve a desired management emphasis as expressed in goals and objectives.

**aspect-** The direction a slope faces. A hillside facing east has an eastern aspect.

**best management practices (BMP) -** A practice or a combination of practices, that is determined by a State (or designated area-wide planning agency) after problem assessment, examination of alternative practices, and appropriate public participation to be the most effective, practical means of preventing or reducing the amount of pollution generated by non-point sources to a level compatible with water quality goals (40 CFR 130.2g).

**big game-** Large mammals, such as deer, elk, and antelope that are hunted for sport.

**biological assessment (BA) -** A stand alone document which reviews BLM planned, funded, executed or permitted programs and activities for possible effects on Federally listed threatened, endangered, proposed and candidate species as identified for the cumulative effects area in coordination with the USFWS . A Biological Assessment is used to satisfy consultation requirements with the USFWS for projects requiring an Environmental Assessment (EA). The Biological Assessment displays the Determination of Effects for the preferred alternative. The Determination of Effects is limited to: (1.) No Effect; (2) Not likely to adversely affect; (3) Likely to adversely affect; and (4) Beneficial effect.

**Biological Opinion-** Document which includes (1) the opinion of the US Fish and Wildlife Service as to whether or not a federal action is likely to jeopardize the continued existence of a listed species, or result in the destruction or adverse modification of designated critical habitat; (2) summary of the information on which the opinion is based; and (3) a detailed discussion of the effects of the action on listed species or designated critical habitat.

**biological diversity-** The number and abundance of species found within a common environment. This includes the

variety of genes, species, ecosystems, and the ecological processes that connect everything in a common environment.

**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 elk and deer.

**candidate species -** A species being considered for listing as a federally endangered or threatened species.

**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.

**chemical treatment-** The use of pesticides and herbicides to control pests and undesirable plant species.

**climax-** The culminating stage in plant succession for a given site. Climax vegetation is stable, self-maintaining, and self-reproducing.

**coarse filter management-** Land management that addresses the needs of all associated species, communities, environments, and ecological processes in an area; as opposed to fine filter management, which focuses only on the needs of a few species.

**Condition Class**– Condition classes are a function of the degree of departure from historical fire regimes resulting in alterations of key ecosystem components such as species composition, structural stage, stand age, and canopy closure. One or more of the following activities may have caused this departure: fire exclusion, timber harvesting, grazing, introduction and establishment of exotic plant species, insects and disease (introduced or native), or other past management activities.

Condition Class 1 – Attributes: Fire regimes are within or near an historical range. The risk of losing key ecosystem components is low. Fire frequencies have departed from historical frequencies by no more than one return interval. Vegetation attributes (species composition and structure) are intact and functioning within an historical range.

Condition Class 2 – Attributes: Fire regimes have been moderately altered from their historical range. The risk of losing key ecosystem components has increased to moderate. Fire frequencies have departed (either increased or decreased) from historical frequencies by more than one return interval. This results in moderate changes to one or more of the following: fire size,

frequency, intensity, severity, or landscape patterns. Vegetation attributes have been moderately altered from their historical range.

Condition Class 3 – Attributes: Fire regimes have been significantly altered from their historical range. The risk of losing key ecosystem components is high. Fire frequencies have departed from historical frequencies by multiple return intervals. This results in dramatic changes to one or more of the following: fire size, frequency, intensity, severity, or landscape patterns. Vegetation attributes have been significantly altered from their historical range.

**conifer**- A tree that produces cones, such as a pine, spruce, or fir tree.

**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, or feed.

**critical habitat**- Areas designated for the survival and recovery of federally listed threatened or endangered species.

**crown closure**- What percent of tree canopies that are touching. When stands have 100 percent crown closure limited to no light reaches the forest floor. See canopy.

**crown height**- The distance from the ground to the base of the crown of a tree.

**cultural resource**- The remains of sites, structures, or objects used by people in the past; this can be historical or pre-historic.

**cumulative effects** - Effects on the environment that result from separate, individual actions that, collectively, may become significant over time.

**deciduous**- Shedding foliage at the end of the growing season.

**Decision Record (DR)** – The decision document associated with an Environmental Assessment (EA)-level analysis.

**density**- Number of trees in an area, generally measured as trees per acre.

**developed recreation**- Recreation that requires facilities that, in turn, result in concentrated use of the area. For example, campgrounds require roads, picnic tables, and toilet facilities.

**direct effects** - Effects on the environment which occur at the same time and place as the initial cause or action.

**dispersed recreation**- Recreation that does not occur in a developed recreation site, such as hunting, backpacking, and scenic driving.

**displacement** - As applied to wildlife, forced shifts in the patterns of wildlife use, either in location or timing of use.

**disturbance**- Any event, such as forest fire or insect infestations that alter the structure, composition, or functions of an ecosystem.

**ecology**- The interrelationships of living things to one another and to their environment, or the study of these interrelationships.

**ecosystem**- An arrangement of living and non-living things and the forces that move among them. Living things include plants and animals. Non-living parts of ecosystems may be rocks and minerals. Weather and wildfire are two of the forces that act within ecosystems.

**edge effect**—The richness of flora and fauna occurring in a transition zone where two plant communities or successional states meet and mix (USDA, 1988).

**effects** - Physical, biological, social and economic results (expected or experienced) resulting from achievement of outputs. Effects can be direct, indirect and cumulative and may be either beneficial or detrimental. (See Impacts)

**encroachment**— The progression of trees from forested areas into grassland or shrubland.

**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.

**Environmental Assessment (EA)** - A statement of the environmental impacts of a proposed action and alternatives to it.

**escape cover**- Vegetation of sufficient size and density to hide an animal, or an area used by animals to escape from predators.

**fauna**-The animal life of an area.

**fire-adapted** – Having evolved strategies that that allow populations to be maintained on sites where fires commonly occurred.

**fire cycle**- The average time between fires in a given area.

**fire, types:** <http://www.nifc.gov/fireinfo/glossary.html>

**Spot Fire** – A fire ignited outside the perimeter of the main fire by flying sparks or embers.

**Torching** – The ignition and flare-up of a tree or small group of trees, usually from bottom to top.

**Crown Fire (Crowning)** – The movement of fire through the crowns of trees or shrubs more or less independently of the surface fire.

**Fire management** – includes fire suppression, fire use, and prescribed fire.

**Fire management plan** – Strategic plans that define a program to manage wildland and prescribed fires based on approved land management plans.

**fire regime**- The characteristics of fire in a given ecosystem, such as the frequency, predictability, intensity, and seasonality of fire.

**Fire use** – The management of naturally ignited wildland fire to accomplish specific pre-stated resource management objectives in predefined geographic areas outlined in approved Fire Management Plans.

**flora**- The plant life of an area.

**forage**- All browse and non-woody plants that are eaten by wildlife and livestock.

**forb**- A broadleaf plant that has little or no woody material in it.

**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 sustaining flow of goods and services for people.

**fragmentation**- The splitting or isolating of patches of similar habitat, typically forest cover, but including other types of habitat. Habitat can be fragmented naturally or from forest management activities, such as clearcut logging.

**fuel**- combustible plant material, both living and dead that is capable of burning in a wildland fire situation.

**fuel break** – A zone in which fuel quantity has been reduced or altered to provide a position for suppression forces to make a stand against wildfire. Used for suppression safety and fire behavior modification. Fuel breaks may consist of one or a combination of the following: Natural barriers, constructed fuel breaks, manmade barriers. The effectiveness of fuel breaks is improved when strategically located adjacent to areas containing low fuel accumulation (Tons/Acre). In the long-term fuel breaks are more effective when

managed to maintain a low fuel loading. Tools used for fuel break maintenance include mechanical treatment, prescribed burning, and grazing.

**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.

**fuels treatment** – The rearrangement or disposal of natural or activity fuels to reduce fire hazard.

**game species**- Any species of wildlife or fish that is harvested according to prescribed limits and seasons.

**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 the data. In a sense, GIS can be thought of as a higher order map.

**habitat** - A place where a plant or animal naturally or normally lives or grows.

**hiding area/cover**- Vegetation capable of hiding 90 percent of an adult elk or deer from human's view at a distance of 200 feet or less.

**interdisciplinary team**- A team of individuals with skills from different disciplines that focuses on the same task or project, often referred to as an ID Team.

**irretrievable**- A category of impacts mentioned in the National Environmental Policy Act. An irretrievable effect applies to losses of production or commitment of renewable natural resources.

**irreversible**- A category of 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.

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

**mechanical treatment** – Relative to this analysis, the manipulation of fuels by mechanical and manual means. Mechanical treatments use machinery, manual treatments use hand-held tools such as chainsaws.

**mesic**- Land conditions that are moist in nature.

**mineral soil**- Soil that consists mainly of inorganic material, such as weathered rock.

**mitigation-** Actions taken to avoid, minimize, or rectify impacts of a land management practice; reducing or eliminating the impact by preservation and maintenance operations.

**mosaic-** Areas with a variety of plant communities over a landscape, such as areas with trees and areas without trees occurring over a landscape.

**multi-story-** A vertical arrangement of 3 or more canopy layers within the same area.

**National Fire Plan** – A national plan of action that directs the USDA Forest Service and the Departments of the Interior to prepare for wildland fires and reduce their impacts on people and resources. The National Fire Plan is based on the five key points of firefighting, rehabilitation and restoration, hazardous fuel reduction, community assistance, and accountability.

**NEPA (National Environmental Policy Act)** - 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.

**No Action alternative** - An alternative that maintains established trends or management direction.

**non-commercial vegetative treatment-** The removal of trees for reasons other than commercial purposes.

**nongame-** Wildlife species that are not hunted for sport.

**nonpoint source pollution-** Pollution whose source is not specific in location. The sources of the discharge are dispersed, not well defined, or constant.

**notice of intent-** A notice in the federal register of intent to prepare an environmental analysis on a proposed action.

**noxious weed** - According to the Federal Noxious Weed Act (PL 93-629), a weed that causes disease or has other adverse effects on man or his environment and therefore is detrimental to the agriculture and commerce of the United States and to the public health. Identified by designation in Montana.

**overstory-** The upper canopy layer; the plants below comprise the understory.

**permitted grazing-** Grazing on public lands under the terms of a grazing permit.

**precommercial thinning-** A felling made in an immature stand to improve the average form of the trees that remain.

**predator-** An animal that lives by preying on other animals

**prescribed fire-** Fire set intentionally in wildland fuels under prescribed conditions and circumstances.

**prescription-** Management practices to accomplish specific land and resource management objectives.

**public land-** Land for which title and administration rests with the Bureau of Land Management (BLM).

**rangeland-** 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.

**raptor-** A bird of prey, such as an eagle or hawk.

**reforestation-** The restocking of an area with forest trees, by either natural or artificial means.

**regeneration-** The renewal of a tree crop by either natural or artificial means.

artificial – Restocking an area with forest trees by planting seedlings not grown on site but of native origin.

natural – Restocking an area with forest trees from seeds that fall from existing trees on the site.

delayed-natural – Restocking an area with forest trees from natural seeds that fall from existing trees on the site over long time periods (5 to 100 years or more). Existing seed source is not available to restock within 5 years. Reforestation will progress over a span of time (5 to 100 or more years) from the existing seed source, as new seedlings will have to grow for 40 to 80 years and cast more seed.

**Resource Management Plan (RMP)** – A planning document for an administrative unit managed by the Bureau of Land Management that provides general guidance and direction for land management activities within that administrative unit.

**restoration** (of ecosystems)- Actions taken to modify an ecosystem to achieve a desired, healthy, and functioning condition.

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

**riparian** – Areas with distinctive resource values and characteristics that are comprised of an aquatic ecosystem and adjacent upland areas that have direct relationships with the aquatic system. This includes floodplains, wetlands, and

all areas within a horizontal distance of approximately 100 feet from the normal high waterline of a stream channel, or from the shoreline of a standing body of water.

**riparian ecosystem-** The ecosystems around or next to water areas that support unique vegetation and animal communities as a result of the influence of water.

***Review and Update of the 1995 Federal Wildland Fire Management Policy (2001 Federal Fire Policy)***- A policy that finds and recommends that federal fire management activities and programs are to provide for firefighter and public safety, protect and integrate land management objectives and human welfare, integrate programs and disciplines, require interagency collaboration, emphasize the natural ecological role of fire, and contribute to ecosystem sustainability.

**salvage harvest** – The cutting of trees that are dead, dying, or deteriorating (i.e. because they are damaged by fire or insects) before they lose their commercial value as sawtimber.

**savannah-** A grassland that has scattered individual trees.

**sawtimber-** Trees containing at least one 12 foot sawlog or two noncontiguous 8 foot logs, and meeting regional specifications for freedom from defect. Softwood trees must be at least 8 inches in diameter and hardwood trees 11 inches in diameter at breast height.

**Section 202** – A Wilderness Study Area (WSA) that is being studied under authority of Section 202 of the Federal Land Policy and Management Act of 1976. FLPMA requires recurrent land-use planning by the Bureau of Land Management.

**sediment** – Solid material, both mineral and organic, that is in suspension, being transported, or has been moved from its site of origin by air, water, gravity, or ice.

**Special Status Species** – A group that includes five classes of plants and animals: A.- Federally Listed Threatened and Endangered Species and Designated Critical Habitats; B. – Federally Proposed Species and Proposed Critical Habitats; C. – Candidate Species; D. – State Listed Species; and E. – BLM Sensitive Species.

**seral-** The stage of succession of a plant or animal community that is transitional. If left alone, the seral stage will give way to another plant or animal community that represents a further stage of succession.

**silviculture-** The art and science that promotes the growth of single trees and the forest as a biological unit.

**stand-** A group of trees that occupies a specific area and is similar in species, age, and condition.

**stand replacement-** When a stand has been totally modified by some disturbance (fire, insects, disease, logging), and needs to start, or be started, over.

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

**successional stage** - A stage of development of a plant community as it moves from bare ground to climax. The grass-forb stage of succession precedes the woody shrub stage.

**succession-** The natural replacement, in time, of one plant community with another. Conditions of the prior plant community (or successional stage) create conditions that are favorable for the establishment of the next stage.

**suppression** – Any act taken to slow, stop, or extinguish a fire. Examples of suppression activities include fireline construction, backfiring, and application of water or chemical fire retardants.

**sustainability-** The ability of an ecosystem to maintain ecological processes and functions, biological diversity, and productivity over time.

**temporary road** –Temporary roads are used for a single, short-term use, i.e. to haul timber to developed roads, access to build water developments or conduct other administrative functions, etc.

**thinning-** A cutting made in an immature stand of trees to accelerate growth of remaining trees or to improve the form of the remaining trees.

**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.

**Total Maximum Daily Loads (TMDL)-** A requirement (Clean Water Act 303 (d)) that establishes the maximum allowable loading for each pollutant for a waterbody to meet water quality standards and allocates that load among polluting contributors.

**type conversion-** The conversion of the dominant vegetation in an area from forested to non-forested or from one species to another.

**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.

**understory burn-** A type of burn designed to reduce fuel accumulations beneath an overstory tree canopy and be designed to achieve specified levels of site preparation.

**vegetation management-** Activities designed primarily to promote the health of forest vegetation for multiple-use purposes.

**vegetation type-** A plant community with distinguishable characteristics.

**Visual Resource Management (VRM) Class I areas** (including all Wilderness and Wilderness Study Areas (WSAs) unless specifically exempted in an RMP) – To preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.

**VRM Class II areas** – To retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color and texture found in the predominant natural features of the characteristic landscape.

**VRM Class III areas** – The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

**VRM Class IV areas** – To provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful

location, minimal disturbance and repeating the basic elements.

**watershed-** The entire region drained by a waterway (or into a lake or reservoir). More specifically, a watershed is an area of land onto which rain falls and is subsequently stored in soil then released down slope to a stream. Watersheds are divided by topographic features.

**wetlands-** Those areas that are inundated by surface or ground water with a frequency sufficient, under normal circumstances, to support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands include marshes, bogs, sloughs for growth and reproduction. Wetlands include marshes, bogs, sloughs, potholes, river overflows, mud flats, wet meadows, seeps, and springs.

**Wild and Scenic Rivers:** Management designation that currently applies to the Upper Missouri Wild and Scenic River. Eligible river segments meet determinations of being free-flowing and having adjacent land area possessing at least one river-related value considered to be outstandingly remarkable.

**Wildland fire-** Any wildland fire that is not a prescribed fire.

**Wildland Urban Interface (WUI)** – The line, area, or zone where structures and other human developments meet or intermingle with undeveloped wildland or vegetative fuels.

**wildlife habitat diversity-** The distribution and abundance of different plant and animal communities and species within a specific area.

**Woody debris** - The residue left on the ground after a fire, storm, timber cutting, or other event. Woody debris includes unused logs, uprooted stumps, broken or uprooted stems, branches, bark, etc.

**woody draw-** A classification of areas, particularly in grassland settings, where an overstory of woody vegetation in small drainages creates habitat for many wildlife species and shade/wind protection and forage for livestock. The vegetation is a result of higher moisture conditions than in the surrounding areas but surface water if any, running thru the areas is generally short term.

**xeric-** Land conditions that are dry in nature.