

Glossary

A

abandoned mine: An abandoned hardrock mine on, or affecting, public lands managed by the BLM, at which exploration, development, mining, reclamation, maintenance, and inspection of facilities and equipment, and other operations ceased as of January 1, 1981 (the effective date of BLM's Surface Management regulations codified at 43 CFR 3809), with no evidence demonstrating that the miner intends to resume mining.

Abandoned Mine Lands (AML) Program: A BLM program that focuses on reclaiming hardrock abandoned mine lands on, or affecting, public lands managed by the BLM.

Adaptive Management: The process of implementing management decisions incrementally, so that changes can be made if the desired results are not being achieved.

absorption: The process by which a chemical or other substance is able to pass through body membranes and enter an organism.

acquired lands: Acquired lands, as distinguished from public lands, are those lands under Federal ownership that have been obtained by the Government by purchase, condemnation, or gift, or by exchange for such purchased, condemned, or donated lands, or for timber on such lands.

active ingredient (a.i.): The chemical or biological component that kills or controls the target pest.

Activity Plan: A type of Implementation Plan; an Activity Plan usually describes multiple projects and applies Best Management Practices (BMPs) in order to meet Resource Management Plan (RMP) objectives. Examples of Activity Plans include Interdisciplinary Management Plans, Habitat Management Plans, Recreation Area Management Plans, and Grazing Plans.

actual use: The amount of animal unit months (AUMs) consumed by livestock based upon the numbers of livestock and grazing dates submitted by the livestock operator and confirmed by periodic field checks.

Adaptive Management: A type of natural resource management in which decisions are made as part of an ongoing science-based process. Adaptive Management involves testing, monitoring, and evaluating applied strategies, and incorporating new knowledge into management approaches that are based upon scientific findings and the needs of society. Results are used in order to modify management policy, strategies, and practices.

additive: A substance added to another in relatively small amounts in order to impart or improve desirable properties or suppress undesirable properties.

additive effect: A situation in which combined effects of exposure to two chemicals simultaneously is equal to the sum of the effect of exposure to each chemical given alone.

adjuvant: A chemical that is added to the pesticide formulation in order to enhance the toxicity of the active ingredient or to make the active ingredient easier to handle.

Administrative Access. A route that allows access for purposes of maintenance or operation.

Administrative Routes: Administrative routes are those that are limited to authorized users (typically, motorized access). These are existing routes that lead to developments that have an administrative purpose, where the BLM, or a permitted user, must have access for regular maintenance or operation. These authorized developments could include such items as power lines, cabins, weather stations, communication sites, spring developments, corrals, or water troughs.

adsorption: 1) The adhesion of substances to the surface of solids or liquids, and 2) the attraction of ions of compounds to the surface of solids or liquids.

adverse effect (impact): An impact that causes harm or a negative result.

aerobic biodegradation: The breakdown of organic contaminants by microorganisms when oxygen is present.

affected environment: A physical, biological, social, and economic environment within which human activity is proposed. The natural, physical and human-related environment that is sensitive to changes from the alternatives.

- air pollutant:** Any substance in the air that could, if in high enough concentration, harm humans, animals, vegetation, and/or material. Air pollutants may include almost any natural or artificial matter capable of being airborne in the form of solid particles, liquid droplets, gases, or a combination of these.
- air pollutant:** Any substance in air that could, if in high enough concentration, harm humans, animals, vegetation, or material. Air pollutants may include almost any natural or artificial matter capable of being airborne, in the form of solid particles, liquid droplets, gases, or a combination of these.
- air pollution:** The contamination of the atmosphere by any toxic or radioactive gases and particulate matter as a result of human activity.
- air quality:** Refers to standards for various classes of land as designated by the Clean Air Act (PL 88-206: Jan. 1978.). The composition of air with respect to quantities of pollution therein; used most frequently in connection with “standards” of maximum acceptable pollutant concentrations.
- Air Quality Classes:** Classifications established under the Prevention of Significant Deterioration (PSD) portion of the Clean Air Act (CAA), which limits the amount of air pollution considered significant within an area. Class I applies to areas where almost any change in air quality would be significant; Class II applies to areas where the deterioration normally accompanying moderate well-controlled growth would be insignificant; and Class III applies to areas where industrial deterioration would generally be insignificant.
- airshed:** A geographical area in which atmospheric characteristics are similar, such as mixing height and transport winds.
- alien species:** Per Executive Order (EO) 13112, alien species means, with respect to a particular ecosystem, any species, including its seed, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem.
- allotment (grazing):** Area designated for the use of a certain number and kind of livestock for a prescribed period of time.
- allotment:** An area of land in which one or more livestock operators graze their livestock. Generally, allotments consist of BLM-managed public lands; however, they may include other federally managed, State-owned, and private lands. An allotment may include or more separate pastures. Livestock numbers and periods of use are specified for each allotment.
- Allotment Management Plan (AMP):** A concisely written program of livestock grazing management, including supportive measures, if required, designed to attain specific management goals in a grazing allotment. An AMP is prepared in consultation with the permittee(s), lessee(s), and other affected interests. Livestock grazing is considered in relation to other uses of the range, and to renewable resources (such as watershed, vegetation, and wildlife). An AMP establishes seasons of use, the number of livestock to be permitted, the range improvements needed, and the grazing system. A long-term operation plan that is the implementing document for the decision made through the environmental analysis process [in accordance with the National Environmental Policy Act (NEPA)], that promotes progress toward Desired Conditions (Goals and Objectives).
- Allowable Cut (forestry):** The amount of timber that can be harvested on an annual or decadal basis consistent with the principle of sustained yield. The allowable cut includes all planned timber harvest volumes, exclusive of such products as Christmas trees, branches, and cones.
- Allowable Sale Quantity (ASQ) (forestry):** The quantity of timber that may be sold from an area covered by a land management plan (Resource Management Plan) during a period specified by the Plan; usually, expressed as the average annual ASQ.
- all-terrain vehicle (ATV):** A wheeled vehicle other than a snowmobile, defined as having a wheelbase and chassis of fifty (50) inches in width or less, steered with handlebars; generally, having a dry weight of 800 pounds or less, that travels on 3 or more low-pressure tires, and with a seat designed to be straddled by the operator.
- alluvial soil:** A soil developing from recently deposited alluvium and exhibiting essentially no horizon development or modification of the recently deposited materials.

- alluvium:** Clay, silt, sand, gravel, or other rock materials transported by moving water; deposited in comparatively recent geologic time as sorted or semi-sorted sediment in rivers, floodplains, lakes, and shores, and in fans at the base of mountain slopes.
- alternatives:** A choice of two or more things. In accordance with the National Environmental Policy Act (NEPA), alternatives to the Proposed Action must be examined during the planning process. The discussion of alternatives must define the issues and must provide a clear basis for choice by the decision-maker and the public (40 CFR 1502.14).
- ambient air:** Any unconfined portion of the atmosphere; open air and surrounding air. Often used interchangeably with “outdoor air.”
- Ambient Air Quality:** The state of the atmosphere at ground level as defined by the range of measured and/or predicted ambient concentrations of all significant pollutants for all averaging periods of interest.
- Ambient Noise:** The all-encompassing noise level associated with a given environment, being a composite of sounds from all sources.
- Amendment:** The process for considering or making changes in the terms, conditions, and/or decisions of approved Resource Management Plans (RMPs) or Management Framework Plans (MFPs). Usually, only one or two issues are considered that involve only a portion of the Planning Area.
- amenity:** Resource use, object, feature, quality, or experience that is pleasing to the mind or senses; typically, refers to values for which monetary values are not or cannot be established (such as scenic or wilderness values).
- ammonite:** The coiled, flat, chambered fossil shell of an extinct cephalopod mollusk that was abundant in the Cretaceous Period.
- anadromous:** A term used to describe fish that mature in the sea and swim up freshwater rivers and streams to spawn. Salmon, steelhead, and sea-run cutthroat trout are examples.
- Analysis Area:** The geographic area defining the scope of analysis for the project. Sometimes for a particular resource, the analysis area may have to be larger when effects (impacts) have the potential to extend beyond the boundaries of the proposal. May also be referred to as the “Planning Area.”
- Analysis of the Management Situation (AMS):** Assessment of the current management direction. It includes a consolidation of existing data needed in order to analyze and resolve identified issues; a description of current BLM management guidance; and a discussion of existing problems and opportunities for solving them.
- anaerobic biodegradation:** The breakdown of organic contaminants by microorganisms when oxygen is not present.
- Animal Unit (AU):** A standardized unit of measurement for range livestock that is equivalent to 1 cow, 1 horse, 5 sheep, 5 goats, or 4 reindeer, all over 6 months of age.
- Animal Unit Month (AUM):** The amount of forage necessary for the sustenance of 1 cow; an “animal unit” or its equivalent for a period of 1 month. The animal unit (AU), in turn, is defined as 1 mature 1,000-pound cow and her suckling calf.
- annual (plant):** A plant whose life cycle is completed in 1 year or season.
- annual mortality (forestry):** The average annual volume of sound wood (free from decay) in growing-stock trees that died from natural causes during the period between inventories.
- Annual Operating Instructions (AOI):** Annual instructions, developed with each livestock permittee, describing livestock management, livestock pasture rotations, season of use, utilization, and/or residual levels.
- antifoamer:** A type of adjuvant added to a commercial pesticide that prevents the formation of foam.
- Application for Permit to Drill (APD):** An application to drill a well is submitted by a lessee or operator to the BLM. The APD consists of a Drilling Plan that discusses downhole specifications and procedures (reviewed by the BLM) and a Surface Use Plan of Operations that examines surface uses, including access roads, well site layout, cut-and-fill diagrams, reclamation procedures, production facility locations, etc. (reviewed by the surface-managing agency). The approved APD is a contract between the operator and the Federal government

and cannot be changed or modified unless authorized by the BLM and the surface-managing agency.

aquatic: Growing, living in, frequenting, or taking place in water; used to indicate habitat, vegetation, or wildlife in freshwater.

aquatic ecosystems: Water dependent environments that serve as habitat for interrelated and interacting communities and populations of plants and animals. Includes the stream channel, lake or estuary bed, water, biotic communities, and the habitat features that occur therein.

aquifer: Rock or rock formations (often sand, gravel, sandstone, or limestone) that contain or carry groundwater, and that act as water reservoirs.

Area of Critical Environmental Concern (ACEC): An area within public lands that requires special management attention in order to protect and prevent irreparable damage to important historic, cultural, or scenic values; fish and wildlife resources; other natural systems or processes; or to protect life or provide safety from natural hazards.

arid: A term applied to regions or climates where lack of moisture severely limits growth and production of vegetation. The limits of precipitation vary considerably according to temperature conditions.

assets: Term used in order to describe roads, primitive roads, and trails that comprise the Transportation System. Also, the general term utilized to describe all BLM constructed "Assets" contained within the Facility Asset Management System (FAMs).

atmospheric deposition: Air pollution produced when acid chemicals are incorporated into rain, snow, fog, or mist, and fall to the earth. Sometimes referred to as "acid rain," it comes from sulfur oxides and nitrogen oxides, products of burning coal and other fuels and from certain industrial processes. If the acid chemicals in the air are blown into areas where the weather is wet, the acids can fall to Earth in the rain, snow, fog or mist. In areas where the weather is dry, the acid chemicals may become incorporated into dusts or smokes.

Attainment Area: A geographic area that is in compliance with the National Ambient Air Quality Standards (NAAQS). An area considered to have air quality as good as or better than the National Ambient Air Quality Standards as defined in the Clean Air Act (CAA).

attenuation: The reduction of sound intensity and energy as a function of distance traveled.

avoidance area: Areas with sensitive resource values where Rights-of-Way (ROWs) and Section 302 permits, leases, and easements would be strongly discouraged. Authorizations made in avoidance areas would have to be compatible with the purpose for which the area was designated and not otherwise be feasible on lands outside the avoidance area.

B

BLM Special Status Species: Species designated as federally Endangered, Threatened, Proposed, or Candidate Species under the Endangered Species Act (ESA); those designated by the Colorado Division of Wildlife (CDOW) as State Endangered or Threatened; and BLM Sensitive Species that are species under status review by the USFWS; species with numbers declining so rapidly that Federal listing may become necessary; species with typically small and widely dispersed populations; or species inhabiting ecological refugia or other specialized or unique habitats.

Backcountry Byways: Vehicle routes that traverse scenic corridors utilizing secondary or backcountry road systems. National Backcountry Byways are designated by the type of road and vehicle needed to travel the Byway.

base property: Land and improvements owned and used by the permittee for a farm or ranch operation, and specifically designated to qualify for a term grazing permit.

beneficial outcomes: Also referenced as "recreation benefits;" improved conditions, maintenance of desired conditions, prevention of worse conditions, and realization of desired experiences.

beneficial uses: Attributes that are considered useful products of the resource.

best available science: Peer-reviewed and other quality-controlled literature, studies, or reports related to planning or project issues.

Best Management Practices (BMPs): Methods, measures, or practices designed to prevent or reduce water pollution including, but not limited to, structural and non-structural controls, operation and maintenance procedures, other requirements, scheduling and distribution of activities. Usually, BMPs are selected on the basis of site-specific conditions that reflect natural background conditions and political, economic, and technical feasibility.

big game: Those species of large mammals normally managed as a sport hunting resource. Generally, includes elk, moose, white-tailed deer, mule deer, mountain goat, bighorn sheep, black bear, and mountain lion.

binder: A material used to bind together 2 or more other materials in mixtures.

bioaccumulation: The process of a plant or animal selectively taking in, or storing, a persistent substance. Over time, a higher concentration of the substance is found in the organism than in the organism's environment.

biodegradability: Susceptibility of a substance to decomposition by microorganisms; specifically, the rate at which compounds may be chemically broken down by bacteria and/or natural environmental factors.

biodiversity: The variety of life and its processes, including all life forms from one-celled organisms to complex organisms such as insects, plants, birds, reptiles, fish, other animals; and the processes, pathways, and cycles that link such organisms into natural communities.

biodiversity): Biological diversity; the variety of life and its processes, and the interrelationships within and among various levels of ecological organization; conservation, protection, and restoration of biological species and genetic diversity are needed in order to sustain the health of existing biological systems. Federal resource management agencies must examine the implications of management actions and development decisions on regional and local biodiversity.

Biological Assessment (BA): An evaluation conducted for Federal projects requiring an Environmental Impact Statement (EIS) in accordance with legal requirements under Section 7 of the Endangered Species Act (ESA) [16 USC 1536(c)]. The purpose of the assessment is to determine whether the Proposed Action is likely to affect any Endangered or Threatened Species.

Biological Evaluation (BE): A documented review of management programs or activities in sufficient detail to determine how a Proposed Action may affect (impact) any Threatened, Endangered, Proposed, or Sensitive Species. Objectives of the BE are to ensure that Federal actions do not contribute to loss of viability of any native or desired non-native plant or animal species (including Threatened, Endangered, Proposed, or Sensitive plant and animal species) or contribute to trends toward Federal listing of any species, and to comply with the requirements of the Endangered Species Act (ESA) that actions of Federal agencies not jeopardize or adversely modify critical habitat of federally listed species.

Biological Opinion (BO): A document prepared by the U.S. Fish and Wildlife Service (USFWS) stating their opinion as to whether or not a Federal action will likely jeopardize the continued existence or adversely modify the habitat of a listed Threatened or Endangered Species.

biological crusts: Thin crust of living organisms on, or just below, the soil surface. A complex mosaic of cyanobacteria, green algae, lichens, mosses, microfungi, and other bacteria that function as living mulch by retaining soil moisture and discouraging annual weed growth. They reduce wind and water erosion, fix atmospheric nitrogen, and contribute to soil organic matter. Also known as cryptogamic, cryptobiotic, microbiotic, or microphytic soil crusts.

biological diversity: The full variety of life in an area including the ecosystems, plant and animal communities, species and genes, and the processes through which individual organisms interact with one another and with their environment. More simply, it is defined as the variety of life and its processes.

boom (herbicide spray): A tubular metal device that conducts an herbicide mixture from a tank to a series of spray nozzles. It may be mounted beneath a helicopter or a fixed-wing aircraft, or behind a tractor or all-terrain vehicle.

brackish: Saline water whose salt concentration is between that of freshwater and seawater (ranging from 0.5 to 30 parts per thousand).

broadcast application: An application of an herbicide that uniformly covers an entire area.

broad scale: A large, regional area, such as a river basin; typically, a multi-State area.

buffer: A solution or liquid whose chemical makeup is such that it minimizes changes in pH when acids or bases are added to it.

buffer strip/zone: A strip of vegetation that is left, or managed, to reduce the impact that a treatment or action on one area might have on another area.

bunchgrass: A grass having the characteristic growth habit of forming a bunch; lacking stolons or rhizomes.

burned area rehabilitation: Efforts undertaken within 3 years of containment of a wildfire in order to repair or improve fire-damaged lands unlikely to recover naturally to management approved conditions, or to repair or replace minor facilities damaged by fire.

C

Candidate Species: Species for which the USFWS has sufficient information on their status and threats to support proposing the species for listing as Endangered or Threatened under the Endangered Species Act (ESA), but for which issuance of a proposed rule is currently precluded by higher priority listing actions. Separate lists for plants, vertebrate animals, and invertebrate animals are published periodically in the Federal Register.

canopy (forestry): The branches and leaves that form the crowns of trees, shrubs, or herbs. Usually, canopy refers to the uppermost layer of vegetation; however, it can be used to describe lower layers in a multi-storied forest.

canopy cover: The percentage of the ground surface covered by the vertical downward projection of the outermost perimeter of the plant foliage in a given area.

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

carcinogen: A chemical capable of inducing cancer.

carrier: A non-pesticide substance added to a commercial pesticide formulation to make it easier to handle or apply.

carrying capacity: The maximum population or level of activity that can be supported without degradation of the habitat or the population. In addition to the site characteristics, it is a function of management goals and management intensity. The maximum population or level of activity that can be supported without degradation of the habitat or the population.

casual use: Activities that involve practices that do not ordinarily result in any appreciable disturbance or damage to the public lands, resources or improvements and, therefore, do not require a Right-of-Way (ROW) grant or temporary use permit. Also means any short-term non-commercial activity that does not result in appreciable damage or disturbance to the public lands, their resources or improvements, and that is not prohibited by closure of the lands to such activities (43 CFR 2920). Generally, casual use includes the collecting of geochemical, rock, soil, or mineral specimens using hand tools, hand panning, and non-motorized sluicing. It also, generally, includes use of metal detectors, gold spears, and other battery-operated devices for sensing the presence of minerals, and hand battery-operated dry washers. Casual use does not include the use of mechanized earth-moving equipment, truck-mounted drilling equipment, suction dredges, motorized vehicles in areas designated as closed to off-road vehicles, chemicals, or explosives. It also does not include occupancy or operations where the cumulative effects (impacts) of the activities result in more than negligible disturbance.

Category I Lands: Public lands suitable for retention in public ownership and needed for multiple-use management that will not be considered for sale.

Category II Lands: Public lands that will be considered for sale; lands offered for sale for 2 years may then be considered for other types of disposal, including exchanges or public purpose disposal actions.

cave: Any naturally occurring void, cavity, recess, or system of interconnected passages beneath the surface of the Earth, or within a cliff or ledge, and large enough to permit a person to enter, whether the entrance is excavated or naturally-formed. Such term may include any natural pit, sinkhole, or other opening that is an extension of a cave entrance or that is an integral part of the cave.

cavity (forestry): The hollow excavated in a tree that is used by birds or mammals for roosting and/or reproduction.

chaining: Vegetation removal that is accomplished by hooking a large anchor chain between 2 bulldozers; as the bulldozers move through the vegetation, the vegetation is knocked to the ground. Chaining kills a large percentage of the vegetation, and is often followed 1 or 2 years later by burning and/or seeding.

chemical degradation: The breakdown of a chemical substance into simpler components through chemical reactions.

chemical vegetation treatment: Application of herbicides in order to control invasive species/noxious weeds and/or unwanted vegetation. In order to meet resource objectives, the preponderance of chemical treatments would be used in areas where cheatgrass or noxious weeds have invaded sagebrush steppe. In these areas, fine fuel loads are extremely high due to cheatgrass dominance of the understory. The effectiveness of chemical treatments increases if they are applied following prescribed or wildland fire.

chronic adverse effect level: The level at which a substance can result in adverse effects (impacts) in which symptoms recur frequently or develop slowly over a long period of time.

chronic exposure: Exposures that extend over the average lifetime, or for a significant fraction of the lifetime, of the individual. Chronic exposure studies are used in order to evaluate the carcinogenic potential of chemicals and other long-term health effects.

Class I Area: Under the 1977 Clean Air Act (CAA) amendments, all international parks, parks larger than 6,000 acres, and national Wilderness Areas larger than 5,000 acres that existed on August 7, 1977. This class provides the most protection to pristine lands by severely limiting the amount of additional air pollution that can be added to these areas.

Class I Inventory (archaeology): A professionally prepared study that includes a compilation and analysis of all reasonably available cultural resource data and literature.

Class II Inventory (archaeology): A professionally conducted, statistically based sample survey designed to aid in characterizing the probable density, diversity, and distribution of cultural properties within a large area.

Class III Inventory (archaeology): A professionally conducted, continuous, intensive pedestrian survey of an entire project area aimed at locating and recording all cultural resources.

Clean Air Act of 1963 (CAA) and Amendments: Federal legislation governing air pollution control.

climate: The composite or generally prevailing weather conditions of a region throughout the year, averaged over a series of years.

closed (travel management): Generally, denotes that an area is not available for a particular use or uses; refer to specific definitions found in law, regulations, or policy guidance for application to individual programs. For example, 43 CFR 8340.0-5 sets forth the specific meaning of "closed" as it relates to off highway vehicle (OHV) use, and 43 CFR 8364 defines "closed" as it relates to closure and restriction orders.

closed road: A road, or segment of road, that is restricted from certain types of use during certain seasons of the year. The prohibited use and the time period of closure must be specified.

coarse woody debris: Pieces of woody material derived from tree limbs, boles, and roots in various stages of decay; generally, having a diameter of at least 3 inches and a length greater than 3 feet.

Code of Federal Regulations (CFR): A codification of the general and permanent rules published in the *Federal Register* by the executive departments and agencies of the Federal government.

- Collaborative Partnerships:** Refers to people working together, sharing knowledge and resources, in order to achieve desired outcomes for public lands and communities within statutory and regulatory frameworks.
- Common Reservoir:** All or part of any oil or gas, or oil and gas, field that comprises, and includes, any area that is underlaid or that, from geological or other scientific data or experiments or from drilling operations or other evidence, appears to be underlaid by a common pool or accumulation of oil or gas or oil and gas.
- community:** A group of one or more populations of plants and animals in a common spatial arrangement; an ecological term used in a broad sense to include groups of various sizes and degrees of integration.
- Community Growth Area:** BLM-managed public lands adjacent to, between, and surrounding communities; also referred to as Wildland-urban Interface (WUI) Areas.
- Comprehensive Travel Management:** The proactive interdisciplinary planning; on-the-ground management and administration of travel networks (both motorized and non-motorized) designed to ensure that public access, natural resources, and regulatory needs are considered. It consists of inventory, planning, designation, implementation, education, enforcement, monitoring, easement acquisition, mapping and signing, and other measures necessary in order to provide access to public lands for a wide variety of uses (including uses for recreational, traditional, casual, agricultural, commercial, educational, and other purposes).
- Concession Leases:** Authorize the operation of recreation-oriented services and facilities by the private sector on BLM-managed public lands, in support of BLM recreation programs. The Concessionaire is authorized through a Concession Lease administered on a regular basis. The lease requires the Concessionaire to pay fees to the BLM in exchange for the opportunity to carry out business activity.
- Condition Class (Fire Regimes):** Fire Regime Condition Classes are a measure describing the degree of departure from historical fire regimes, possibly resulting in alterations of key ecosystem components (such as species composition, structural stage, stand age, canopy closure, and fuel loadings). One or more of the following activities may have caused this departure: fire suppression, timber harvesting, livestock grazing, introduction and establishment of exotic plant species, introduced insects or disease, or other management activities.
- Conditions of Approval (COAs):** Conditions or provisions (requirements) under which an Application for a Permit to Drill (APD) or a Sundry Notice is approved.
- conifer:** Any of a group of needle- and cone-bearing evergreen trees.
- connectivity:** A condition in which the special arrangement of vegetation types allows organisms to move freely across the landscape.
- Conservation Agreement:** A formal signed agreement between the U.S. Fish and Wildlife Service (USFWS) or the National Oceanographic and Atmospheric Administration (NOAA)-Fisheries, and other parties, that implement specific actions, activities, or programs designed to eliminate or reduce threats to, or otherwise improve the status of, a species. Conservation Agreements can be developed at a State, regional, or national level and, generally, include multiple agencies at both the State and Federal level, as well as Native American tribes. Depending upon the types of commitments the BLM makes in a Conservation Agreement, and the level of signatory authority, RMP Revisions or Amendments may be required before the Conservation Agreement is signed, or subsequently in order to implement the Conservation Agreement.
- Conservation Strategy:** A strategy outlining current activities or threats that are contributing to the decline of a species, along with the actions or strategies needed in order to reverse or eliminate such a decline or threats. Generally, Conservation Strategies are developed for species of plants and animals that are designated as BLM Sensitive Species, or that have been determined by the U.S. Fish and Wildlife Service (USFWS) or the National Oceanographic and Atmospheric Administration (NOAA)-Fisheries to be Federal Candidate

Species under the Endangered Species Act (ESA); a Management Plan designed to conserve or sustain particular ecosystem elements (such as rare species or habitats).

conservation watershed: Conservation watersheds have watershed processes and functions that occur in a relatively undisturbed and natural landscape setting. Generally, the majority of ownership in the watershed or sub-watershed is comprised of BLM, U.S. Forest Service (USFS), or Colorado Parks and Wildlife, or is based upon the fisheries value and miles of stream flowing across BLM-managed public lands.

consultation: Exchange of information and interactive discussion; when the “C” in consultation is capitalized it refers to consultation mandated by statute or regulation that has prescribed parties, procedures, and timelines [such as Consultation under National Environmental Policy Act (NEPA) or Section 7 of the Endangered Species Act (ESA)].

Council on Environmental Quality (CEQ): An advisory council to the President of the United States, established by the National Environmental Policy Act (NEPA). It reviews Federal programs for their effect (impact) on the environment, conducts environmental studies, and advises the President on environmental matters.

Controlled Surface Use (CSU) Stipulations: A category of stipulations that allows some use and occupancy of public lands while, at the same time, protecting identified resources or values. A CSU stipulation would allow the BLM to require special operational constraints, or to shift surface-disturbing activities to more than 200 meters in order to protect the specified resource or value.

Core Wildlife Areas: Core wildlife areas include areas of high habitat value for multiple species, including sage-grouse, elk, and mule deer.

Council on Environmental Quality (CEQ): An advisory council to the President of the United States, established by the National Environmental Policy Act of 1969 (NEPA). It reviews Federal programs in order to analyze and interpret environmental trends and information.

countervailing: A type of cumulative impact where negative effects (impacts) are compensated for by beneficial effects (impacts).

cover: Trees, shrubs, rocks, or other landscape features that allow an animal to partly or fully conceal itself; and the area of ground covered by plants of one or more species, usually expressed as a percent of the ground surface.

criteria: Data and information that are used to examine or establish the relative degrees of desirability of alternatives, or the degree to which a course of action meets an intended objective.

criteria pollutants: Air pollutants designated by the U.S. Environmental Protection Agency (EPA) as potentially harmful and for which ambient air quality standards have been set to protect the public health and welfare. The criteria pollutants are carbon monoxide, sulfur dioxide, particulate matter, nitrogen dioxide, ozone, hydrocarbons, and lead.

critical habitat: Specific areas within the habitat a species occupies at the time it is listed under the Endangered Species Act (ESA) that have physical or biological features that: (a) are essential to the conservation of the species, and that: (b) may require special management considerations or protection; and specific areas outside the habitat a species occupies at the time it is listed that the Secretary of the Interior determines are essential for species conservation.

cross-country travel: Travel between designated routes.

crucial winter range: That part of the overall range where 90 percent of the individuals are located during the average 5 winters out of 10 from the first heavy snowfall to spring green-up, or during a site-specific period of winter as defined for each Colorado Division of Wildlife (CDOW) Data Analysis Unit (DAU).

cryptogamic soil or crust: A thin crust made up of mosses, lichens, algae, and bacteria, known collectively as cryptogams. Cryptogams function as soil builders, forming a spongy layer that helps protect soil from erosion, absorbs moisture, and provides nitrogen and other nutrients for plant growth. Also referred to as cryptobiotic or microbiotic soils or crusts.

cultural landscape: All physical remains of past human occupation in their original setting within a defined geographical area.

cultural resource or cultural property: A definite location of human activity, occupation, or use, normally greater than 50 years of age, identifiable through field inventory, historical documentation, or oral evidence. The term includes archaeological, historic, or architectural sites, structures, places, or sites or places with important public and scientific uses, and may include definite locations (sites or places) of traditional cultural or religious importance to specified social and/or cultural groups. Cultural resources are concrete, material places; and things that are located, classified, ranked, and managed through the system of identifying, protecting, and utilizing for public benefit described in applicable laws, rules, regulations, policies, standards, and guidelines.

Cultural Resources Inventory: An inventory designed to assess the potential presence of cultural resources. There are 3 classes of surveys:

- **Class I** -- An existing data survey. This is an inventory of a study area in order to (1) provide a narrative overview of cultural resources by using existing information, and (2) compile existing cultural resources site record data on which to base the development of the BLM's site record system.
- **Class II** -- A sampling field inventory designed to locate, from surface and exposed profile indications, all cultural resource sites within a portion of an area so that an estimate can be made of the cultural resources for the entire area.
- **Class III** -- An intensive field inventory designed to locate, from surface and exposed profile indications, all cultural resource sites in an area. Upon its completion, no further cultural resources inventory work is normally needed.

cumulative effects (impacts): Impacts on the environment that result from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions. Cumulative effects can result from individually minor, but collectively significant, actions taking place over a period of time.

D

Deciding Officer: The BLM employee who has the authority to select and/or carry out a specific planning action. (Also Responsible Official, Deciding Official, Authorized Official.)

deferred rotation (grazing): Rotation grazing with regard to deferring pastures beyond the growing season, if they were used early the prior year, or that have been identified as needing deferment for resource reasons.

definite location: Having discernable, map-able, limits or boundaries, on a scale that can be established through observations on surface expression.

degradation: Physical or biological breakdown of a complex compound into simpler compounds.

demographic: Related to the vital statistics of human populations (size, density, growth, distribution, etc.) and the effect of these on social and economic conditions.

denning habitat (lynx): The environment lynx use when giving birth and rearing kittens until they are mobile. The most common component is large amounts of coarse woody debris to provide escape and thermal cover for kittens. Denning habitat must be within daily travel distance of winter snowshoe hare habitat (the typical maximum daily distance for females is about 3 to 6 miles). Denning habitat includes mature and old growth forests with plenty of coarse woody debris. It can also include young regenerating forests with piles of coarse woody debris, or areas where down trees are jack-strawed.

density: The number of individuals per a given unit area.

designated roads and trails: Specific roads and trails identified by the land management agency where some type of motorized vehicle use is appropriate and allowed either seasonally or year-long.

Desired Future Condition (grazing): For rangeland vegetation, the condition of rangeland resources on a landscape scale that meet management objectives. It is based upon ecological, social, and economic considerations during the land planning process. Usually, it is expressed as ecological status or management status of vegetation (species composition, habitat diversity, and age and size class of species) and desired soil qualities (soil cover, erosion, and compaction). In a general context, desired future condition is a portrayal of the

land or resource conditions that are expected to result if goals and objectives are fully achieved.

desired outcomes: A type of land use plan decision expressed as a goal or objective.

developed recreation: Outdoor recreation requiring significant capital investment in facilities to handle a concentration of visitors on a relatively small area. Examples are ski areas, resorts, and campgrounds.

diluent: An inert diluting agent added to a commercial pesticide formulation that decreases the viscosity of the formula.

dilution: The act of mixing or thinning, and therefore decreasing a certain strength or concentration.

direct effects (impacts): Impacts on the environment that are caused by the action and occur at the same time and place.

dispersant: A type of inert ingredient added to an herbicide formulation that reduces the cohesive attraction between like particles.

dispersed recreation: Outdoor recreation in which visitors are diffused over relatively large areas. Where facilities or developments are provided, they are more for access and protection of the environment than for the comfort or convenience of the people.

dispersion: The act of distributing or separating into lower concentrations or less dense units.

disposal: Transfer of public land out of Federal ownership to another party through sale, exchange, or land law statutes.

disturbance: Refers to events that alter the structure, composition, or function of terrestrial or aquatic habitats. Natural disturbances include, among others, drought, floods, wind, fires, wildlife grazing, and insects and pathogens. Human-caused disturbances include actions such as timber harvesting, livestock grazing, roads, and the introduction of exotic species. A discrete event, either natural or human-induced, that results in a change in the existing condition of an ecosystem.

diversity: An expression of community structure; the relative distribution and abundance of different plant and animal communities and species within an area; the relative distribution and abundance of different plant and animal communities and species within an area. It is "high" if there are many equally abundant species. It is "low" if there are only a few equally abundant species.

dominant: A group of plants that by their collective size, mass, or number exerts a primary influence onto other ecosystem components.

dose: The amount of chemical administered or received by an organism, generally, at a given point in time.

dose-response: Changes in toxicological responses of an individual (such as alterations in severity of symptoms) or populations (such as alterations in incidence) that are related to changes in the dose of any given substance.

drainage (oil and gas): Where lands in any leases are being drained of their oil and gas content by wells either on a Federal lease issued at a lower rate of royalty or on non-Federal lands, the lessee shall both drill and produce all wells necessary in order to protect the leased lands from drainage. *Compensation for drainage:* Upon lands owned by the United States being drained of oil or gas by wells drilled on adjacent lands, agreements may be executed with the owners of adjacent land whereby the United States and its lessees shall be compensated for such drainage. Such lands may also be offered for lease (43CRF 3100.2).

drift: That part of a sprayed chemical that is moved by wind off a target site.

E

easement: A right afforded a person or agency to make limited use of another's real property for access or other purposes.

ecological integrity: The capability of an ecosystem to maintain its composition, structure, and function over time; thereby maintaining the productivity of the land and a diversity of plants and animals.

ecosystem: Areas with living organisms interacting with each other and with their physical environment. They are dynamic entities shaped by natural processes and disturbances including succession, fire, floods, and wind. Ecosystems occur at various scales, with smaller ones found within larger ones.

ecosystem-based management: The use of an ecological approach designed to achieve multiple-use and sustained-yield management of public lands by blending the needs of people and environmental values in such a way that public lands represent diverse, healthy, productive, and sustainable ecosystems.

ecosystem diversity: The variety of ecosystem types including their composition, structure, and processes.

ecotone: A boundary or zone of transition between adjacent communities or environments, such as the boundary between a forest and a meadow. Species present in an ecotone are intermixed subsets of the adjacent communities. An ecological community of mixed vegetation formed by the overlapping of adjoining communities.

edge: The place where plant communities meet or where successional stages or vegetative conditions within plant communities come together.

edge effect: The influence of 2 communities on populations in their adjoining boundary zone or ecotone, affecting the composition and density of the populations in these bordering areas.

effect (impact): Environmental change resulting from a Proposed Action. Direct effects are caused by the action and occur at the same time and place, while indirect effects are caused by the action, but are later in time or further removed in distance, although still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems. (NOTE: Effect and impact are synonymous as used in this document.)

eligibility: Qualification of a river for inclusion into the National Wild and Scenic Rivers System (NWSRS) through the determination (professional judgment) that it is free-flowing and, with its adjacent land area, possesses at least 1 river-related value considered to be outstandingly remarkable.

elk security areas: Habitat that allows elk to remain in a defined area despite an increase in stress or disturbance associated with the hunting season or other human activities.

emergency stabilization: Planned actions designed to stabilize and prevent unacceptable degradation to natural and cultural resources, to minimize threats to life or property resulting from the impacts of a fire, or to repair/replace/construct physical improvements necessary in order to prevent degradation of land or resources. Emergency stabilization actions must be taken within 1 year following containment of a wildfire.

emission (air quality): A release into the outdoor atmosphere of air contaminants.

Endangered Species: Any species of animal or plant in danger of extinction throughout all or a significant portion of its range, and so designated by the Secretary of Interior in accordance with the 1973 Endangered Species Act (ESA).

Endangered Species Act (ESA): A law that sets a policy for conserving animal and plant species that are in danger of extinction.

endemic species: Plants or animals that occur naturally in a certain region and whose distribution is relatively limited to a particular locality.

environment: The physical conditions that exist within an area (the area that will be affected by a proposed project), including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance; and the sum of all external conditions that affect an organism or community to influence its development or existence.

environmental analysis: An analysis of alternative actions and their predictable environmental effects (impacts), including physical, biological, economic, and social consequences and their interactions; short- and long-term effects (impacts); direct, indirect, and cumulative effects (impacts).

Environmental Assessment (EA): A concise public document, for which a Federal agency is responsible, that serves to: 1) briefly provide sufficient evidence and analysis for determining

whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI); 2) aid an agency's compliance with the National Environmental Policy Act (NEPA) when no EIS is necessary; and 3) facilitate preparation of an EIS when one is necessary.

Environmental Impact Statement (EIS): A detailed written statement as required by section 12(2)(C) of the National Environmental Policy Act (NEPA) (40 CFR 1508.11). The report must be systematic and interdisciplinary, integrating the natural and social sciences as well as the design arts in planning and decision-making. The report must identify: 1) the environmental impacts of the Proposed Action; 2) any adverse environmental effects (impacts) that cannot be avoided should the proposal be implemented; 3) alternatives to the Proposed Action; 4) the relationship between short-term uses of human environment and the maintenance and enhancement of long-term productivity; and 5) any irreversible and irretrievable commitments of resources that would be involved in the Proposed Action should it be implemented. An analytical document prepared under the NEPA that portrays potential impacts to the human environment of a Proposed Action and its possible alternatives. An EIS is developed for use by decision-makers in order to weigh the environmental consequences of a potential decision.

ephemeral streams: Streams that flow only as a direct response to rainfall or snowmelt events. They have no baseflow.

Epidemiology Study: A study of human population or human populations. In toxicology, a study that examines the relationship of exposures to one or more potentially toxic agent to adverse health effects in human populations.

eradication: Removal of all traces of a population or elimination of a population to the point where individuals are no longer detectable.

erosion: Detachment or movement of soil or rock fragments by water, wind, ice, or gravity. Accelerated erosion is much more rapid than normal, natural, or geologic erosion, primarily as a result of the influence of activities of people, animals, or natural catastrophes.

Essential Fish Habitat (EFH): As defined by Congress in the interim final rule (62FR 66551): "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." For the purpose of interpreting the definition of EFH habitat, "waters" include aquatic areas and their associated physical, chemical, and biological properties; "substrate" includes sediment underlying the waters; "necessary" refers to the habitat required to support a sustainable fishery and the managed species contribution to a healthy ecosystem; and "spawning, breeding, feeding, or growth to maturity" covers all habitat types utilized by a species throughout its life cycle.

evaluation (Plan evaluation): The process of reviewing the Resource Management Plan (RMP), and the periodic plan monitoring reports, in order to determine whether the RMP decisions and the environmental analysis are still valid, and whether the RMP is being implemented.

even-aged management (forestry): Actions resulting in the creation of stands in which trees of essentially the same age grow together. The difference in age between trees forming the main canopy level of a stand usually does not exceed 20 percent of the age of the stand at harvest rotation age.

even-aged regeneration harvest (forestry): A timber-cutting procedure that creates a new age class of trees by using methods including clear-cutting, seed tree, shelterwood, and coppice.

exclusion area: Areas with sensitive resource values where Rights-of-Way (ROWs) and 302 permits, leases, and easements would not be authorized.

existing routes: The roads, trails, or ways that are used by motorized vehicles (4x4 vehicles, all-terrain vehicles, motorized dirt bikes, etc.), mechanized uses (mountain bikes, wheelbarrows, game carts), pedestrians (hikers), and/or equestrians (horseback riders) and are, to the best of BLM's knowledge, in existence at the time of DRMP/DEIS publication.

exotic species: Includes species introduced into an area that may have adapted to the area and compete with resident native (indigenous) species.

Extensive Recreation Management Area (ERMA): Areas in which significant recreation opportunities and problems are limited and explicit recreation management is not required.

Minimal management actions related to the BLM's stewardship responsibilities are adequate in these areas.

extirpation: To cause a species to go extinct; to exterminate.

F

°F: Degrees Fahrenheit.

Federal Land Policy and Management Act of 1976 (FLPMA): Public Law 94-579, October 21, 1976, often referred to as the BLM's Organic Act, which provides the majority of the BLM's legislated authority, direction policy and basic management guidance.

fate: The course of an applied herbicide in an ecosystem or biological system, including metabolism, microbial degradation, leaching, and photodecomposition.

fauna: The vertebrate and invertebrate animals of the area or region.

feasible: Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

federally listed species: Species that are listed by the Department of the Interior, USFWS, or the National Oceanic and Atmospheric Administration, National Marine Fisheries Service as Threatened or Endangered.

Final Environmental Impact Statement (Final EIS): A revision of the Draft Environmental Impact Statement (DEIS) based upon public and agency comments on the DEIS.

fire dependent: An ecosystem evolving under periodic perturbations by fire and that consequently depends upon periodic fires for normal ecosystem function.

fire frequency: The average number of years between fires.

fire intolerant: Species of plants that do not grow well with, or die as the result of, impacts of too much fire.

Fire Regime Condition Class (FRCC): FRCCs are a measure describing the degree of departure from historical fire regimes, possibly resulting in alterations of key ecosystem components (such as species composition, structural stage, stand age, canopy closure, and fuel loadings). One or more of the following activities may have caused this departure: fire suppression, timber harvesting, livestock grazing, introduction and establishment of exotic plant species, introduced insects or disease, or other management activities.

fire return interval: The average time between fires in a given area.

fire severity: The impact of fire on the dominant overstory vegetation: low, mixed, or stand replacement.

fire suppression: All work activities connected with fire-extinguishing operations, beginning with discovery of a fire and continuing until the fire is completely out.

fire tolerant: Species of plants that can withstand a certain frequency and intensity of fire.

fire use: The combination of prescribed fire and wildland fire use for resource benefit to meet resource objectives.

fish habitat: The place where a population of fish species lives and its surroundings; includes the provision of life requirements such as food and cover.

fisheries habitat: Streams, lakes, and reservoirs that support fish populations.

fishery: The act, process, occupation, or season of taking an aquatic species; the total population of fish in a stream or body of water and the physical, chemical, and biological factors affecting that population.

floodplain: The lowland and relatively flat areas adjoining inland and coastal waters, including, at a minimum, that area subject to a 1 percent or greater chance of flooding in any given year.

flora: The plant life characteristic of a region, period, or special environment.

fluid minerals: Oil, gas, coal bed natural gas, carbon dioxide, and geothermal resources.

Food Quality Protection Act (FQPA) Safety Factor: The FQPA Safety Factor is applied to pesticides that exhibit threshold effects to "take into account potential pre- and post-natal toxicity and completeness of the data with respect to exposure and toxicity to infants and children." The Act requires 1) an explicit determination that exposure tolerances are safe for children; 2) an additional Safety Factor of up to 10-fold, if necessary, be used to account for

uncertainty in data relative to children (this is in addition to the current 100-fold Safety Factor which is already used to account for the use of animals, versus humans, in laboratory testing, and the variability in potential adult response to pesticide exposure); and 3) an analysis of exposure risks to children that takes into account the special sensitivity and exposure of children to pesticides.

forage: Vegetation eaten by animals, especially grazing and browsing animals.

forage reserve (grazing): A determination for an allotment, or a portion of an allotment, on which there is no current term permit obligation for some or all of the estimated livestock grazing capacity, and where it has been determined to use the available forage for management flexibility when there is a loss of forage availability on other allotments because of factors such as drought, hail, or fire.

forb: An herbaceous plant without a woody stem other than those in the grass (*Poaceae*), sedge (*Cyperaceae*), or rush (*Juncaceae*) families.

forbs: Broad-leafed plants; includes plants that commonly are called weeds or wildflowers.

forest cover type (forestry): A descriptive classification of forest land based upon the present vegetative species composition and/or locality (such as lodgepole pine, mixed conifer). Most stands are given a classification (stratum label), based upon aerial photo interpretation, that includes the forest cover type, size class, density class, and stand development phase.

forest health: The condition in which forest ecosystems sustain sufficient complexity, diversity, resiliency, and productivity in order to provide for specified human needs and values.

forestland (forest): Land where the potential natural plant community contains 10 percent or more tree canopy cover.

form: The mass or shape of an object, which appears unified, often defined by edge, outline, and/or surrounding space.

formulation: The commercial mixture of both active and inactive (inert) ingredients.

fossilization: The process of fossilizing a plant or animal that existed in some earlier age; the process of being turned to stone.

four-wheel drive vehicle (4x4, 4WD): A passenger vehicle or light truck having power available to all wheels.

fragmentation: Process by which habitats are increasingly subdivided into smaller units, resulting in their increased insularity as well as losses of total habitat area.

fuel (fire): Dry, dead parts of trees, shrubs, and other vegetation that can burn readily.

full-sized vehicle: Routes designated for motorized vehicles that are over 50 inches in width, including passenger cars, high-clearance vehicles, trucks, and other motorized vehicles greater than 50 inches in width.

functional/structural Group: A group of species that, because of similar shoot or root structure, rooting depth, woody or non-woody stems, plant height, photosynthetic pathways, nitrogen fixing ability, life cycle, etc, perform similar roles or functions in the ecosystem, and are grouped together on an ecological site basis.

Functional at-Risk (FAR): 1) Condition in which vegetation and soil are susceptible to losing their ability to sustain naturally functioning biotic communities. Human activities, past or present, may increase the risks; 2) Uplands or riparian-wetland areas that are properly functioning, but a soil, water, or vegetation attribute makes them susceptible to degradation and lessens their ability to sustain natural biotic communities. Uplands are particularly at risk if their soils are susceptible to degradation. Human activities, past or present, may increase the risks.

G

Geographic Information System (GIS): A system of computer hardware, software, data, people, and applications that capture, store, edit, analyze, and display a potentially wide array of geospatial information.

goal: A broad statement of a desired outcome; usually, not quantifiable and may not have established timeframes for achievement.

grade: A slope states as so many feet per mile or as ft/ft (%).

grassland: Areas dominated by grasses and forbs; these areas include foothill and mountain grasslands and grasslands vegetation types.

Grazing Plan: A concisely written program of livestock grazing management, including supportive measures (if required), designed to attain specific management goals in a grazing allotment. A Grazing Plan is prepared in consultation with the permittee(s), lessee(s), and other affected interests. Livestock grazing is considered in relation to other uses of the range and to renewable resources, such as watershed, vegetation, and wildlife. A Grazing Plan establishes seasons of use, the number of livestock to be permitted, the range improvements needed, and the grazing system.

grazing preference: The total number of Animal Unit Months (AUMs) on public land apportioned and attached to base property owned or controlled by a lessee.

grazing system: Scheduled grazing use and non-use of an allotment in order to reach identified goals or objectives by improving the quality and quantity of vegetation.

ground cover: The percentage of biotic and abiotic material (other than bare soil) covering the ground surface including litter, mosses, lichens, vegetation basal area, and rock fragments. Ground cover plus bare soil equals 100 percent.

groundwater: Subsurface water that is in the zone of saturation. The top surface of the groundwater is the "water table." Source of water for wells, seeps, and springs.

growing stock (forestry): A timber inventory classification of live commercial trees meeting specified standards of quality or vigor. Cull trees are excluded. Only includes trees 5.0 inches dbh and larger.

Guidelines: Actions or management practices that may be used in order to achieve desired outcomes, sometimes expressed as Best Management Practices (BMPs). Guidelines may be identified during the planning process; however, they are not considered a land use plan (Resource Management Plan) decision unless the Plan specifies that they are mandatory. Guidelines for grazing administration must conform to 43 CFR 4180.2.

H

habitat: The natural environment of a plant or animal, including all biotic, climatic, and soil conditions, or other environmental influences affecting living conditions; the place where an organism lives.

habitat connectivity: Habitat arrangements that allow organisms to move freely across the landscape.

Habitat Management Plan (HMP): A written and approved Activity Plan for a geographical area that identifies habitat management activities to be implemented in order to achieve specific objectives of planning decisions.

habitat structural stages: Any of several developmental stages of tree stands described in terms of tree size and the extent of canopy closure they create.

habitat type: An aggregation of all land areas potentially capable of producing similar plant communities at climax.

half-life: The amount of time required for half of a compound to degrade.

hardwoods: A conventional term for the wood of broadleaf trees.

Hazard Quotient (HQ): The ratio of the estimated level of exposure to a substance from a specific substance from a specific pesticide application to the reference dose (RfD) for that substance, or to some other index of acceptable exposure or toxicity. A HQ less than or equal to 1 is presumed to indicate an acceptably low level of risk for that specific application.

hazardous fuels (fire): Includes living and dead and decaying vegetation that form a special threat of ignition and resistance to control.

hazardous material: A substance, pollutant, or contaminant that, due to its quantity, concentration, or physical or chemical characteristics, poses a potential hazard to human health and safety, or to the environment if released into the workplace or the environment.

hazardous substance: Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) term identifying those substances designated pursuant to section 1321(b)(2)(A) of Title 33, or 42 USC 9602, or listed in 40 CFR 302 or 355.

hazardous substance release: Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant).

hazardous waste: Refers to a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may pose a substantial threat to human health and the environment.

healthy aquatic community: Varies by species and numbers of target species present, and channel type, and is characterized by: proper amounts of sediment/silt; a diversity of instream habitat complexity; the development/maintenance of undercut bank habitats; adequate canopy cover; appropriate holding habitat (pools/minimum pools depth) commensurate with the identified Rosgen channel type; reduced diurnal water temperature fluctuations; appropriate width to depth ratios; and represented by a healthy biological community (fish and macroinvertebrate diversity and abundance reflect water quality attaining a biological minimum).

herb: A flowering plant whose above-ground stem is not woody; graminoids and forbs.

herbaceous: Non-woody plants that include grasses, grass-like plants, and forbs.

herbicide: A chemical pesticide used to control, suppress, or kill vegetation, or severely interrupt normal growth processes.

herbicide resistance: Naturally occurring heritable characteristics that allow individual weeds to survive and reproduce, producing a population, over time, in which the majority of the plants of the weed species have the resistant characteristics.

Herd Management Areas (HMAs): Areas established for wild and free-roaming horses and burros through the land use planning process. The Wild Free-roaming Horse and Burro Act of 1971 requires that wild free-roaming horses and burros be considered for management where they were found at the time Congress passed the Act. The BLM initially identified 264 areas of use as HMAs.

hiding cover: Vegetation, primarily trees, capable of hiding 90 percent of a standing adult animal from the view of a human at a distance of 200 feet or less.

historic property: Any prehistoric or historic site, district, building, structure, or object included in, eligible, or potentially eligible for inclusion in the National Register of Historic Places (NRHP).

Historic Range of Variability (HRV): The range of ecological conditions, including vegetation structure and natural disturbance regimes, that occurred during the reference period; the period of indigenous settlement from about 1500 to the late 1800s.

home range: The area around an animal's established home that is visited during the animal's normal activities.

hydrologic cycle (water cycle): The ecological cycle that moves water from the air by precipitation to the earth and returns it to the atmosphere; includes evaporation, run-off, infiltration, percolation, storage, and transpiration.

Hydrologic Unit Code (HUC): A hierarchical coding system developed by the USGS in order to identify geographic boundaries of watersheds of various sizes.

hydrophytic plant: A plant that grows in water or in very moist ground, usually found in riparian areas and wetlands.

hydrolysis: Decomposition or alteration of a chemical substance by water.

I

impacts (effects): "Effect" and "impact" are synonymous as used in this report; the effect, influence, alteration, or imprint caused by an action.

impairment: The degree to which a distance of clear visibility is degraded by human-made pollutants.

impermeable: Cannot be penetrated.

Implementation Decisions: Decisions that take action to implement land use planning; generally, appealable to Interior Board of Land Appeals (IBLA) under 43 CFR 4.410.

Implementation Plan: An area or site-specific plan written to implement decisions made in a land use plan (Resource Management Plan). Implementation plans include both Activity Plans and Project Plans.

indigenous: Living or occurring naturally in an area; native, endemic people, flora, or fauna.

indirect effects (impacts): Impacts that are caused by an action, but are later in time or farther removed in distance, although still reasonably foreseeable.

inert ingredient(s): Those ingredients that are added to the commercial product (formulation) and are not active.

infiltration: The movement of water through soil pores and spaces.

insectivore: An organism that feeds mainly on insects.

integrated Pest Management (IPM): A long-standing, science-based, decision-making process that identifies and reduces risks from pests and pest management related strategies. It coordinates the use of pest biology, environmental information, and available technology to prevent unacceptable levels of pest damage by the most economical means, while posing the least possible risk to people, property, resources, and the environment. IPM provides an effective strategy for managing pests in all arenas from developed agricultural, residential, and public areas to wild lands. IPM serves as an umbrella to provide an effective, all encompassing, low-risk approach to protect resources and people from pests. BLM Departmental Manual 517 (Pesticides) defines integrated pest management as “a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks.”

integrated prescription: A multiple-use management practice used to select and schedule applications on a specific area to attain Desired Conditions (Goals and Objectives). This prescription identifies and quantifies outputs, impacts, benefits, and costs of all resources to the extent practical.

Interdisciplinary (ID) Team: A group of resource professionals with different expertise that collaborate to develop and evaluate resource management decisions.

intermittent stream: A stream that flows only at certain times of the year when it receives water from springs or from some surface source (such as melting snow). During the dry season and throughout minor drought periods, these streams will not exhibit flow. Geomorphological characteristics are not well defined, and are often inconspicuous. In the absence of external limiting factors (pollution, thermal modifications, etc.), biology is scarce and adapted to the wet and dry conditions of the fluctuating water level.

invasive plants: Plants that 1) are not part of (if exotic), or are a minor component of (if native), the original plant community or communities; 2) have the potential to become a dominant or co-dominant species on the site if their future establishment and growth is not actively controlled by management interventions; or 3) are classified as exotic or noxious plants under State or Federal law. Species that become dominant for only one to several years (such as short-term response to drought or wildfire) are not invasive plants.

invasive species: Per Executive Order (EO) 13112, an invasive species means an alien (non-native) species whose introduction does, or is likely to, cause economic or environmental harm or harm to human health.

invertebrate: Small animals that lack a backbone or spinal column. Spiders, insects, and worms are examples of invertebrates.

irretrievable commitment: A term that applies to losses of production or commitment of renewable natural resources. For example, while an area is used as a ski area, some or all of the timber production there is “irretrievably” lost. If the ski area closes, timber production could resume; therefore, the loss of timber production during the time the area is devoted to skiing is irretrievable, but not irreversible, because it is possible for timber production to resume if the area is no longer used as a ski area.

irretrievable impact: Commitment of a resource would be considered “irretrievable” when the project would directly eliminate the resource, its productivity, and/or its utility for the life of the project.

irreversible commitment: A term that applies to non-renewable resources, such as minerals and archaeological sites. Losses of these resources cannot be reversed. Irreversible impacts can also refer to the impacts of actions on resources that can be renewed only after a very long period of time, such as the loss of soil productivity.

irreversible impact: The commitment of a resource would be “irreversible” if the project started a “process” (chemical, biological, and/or physical) that could not be stopped. As a result, the resource or its productivity, and/or its utility would be consumed, committed, or lost forever.

isolated find (archaeology): A physical location of past human activity consisting of one or very few artifacts in a location that is interpreted as not representing patterned human behavior. The Colorado Office of Archaeology and Historic Preservation (OAHP) guidelines state that “Typically, isolated finds are transportable artifacts representing a single activity; by definition they are not eligible to the National Register of Historic Places.” Recording the location and nature of isolated finds is considered to realize the information potential of this class of cultural resource.

issue: A matter of controversy, dispute, or general concern over resource management activities or land uses.

issue indicators: A “yardstick” for measuring or comparing any changes associated with each issue or concern by alternative.

J

jurisdictional wetland: A wetland area delineated and identified by specific technical criteria, field indicators, or other information for purposes of public agency jurisdiction. The public agencies that administer jurisdictional wetlands are the USFWS, the EPA, the U.S. Army Corps of Engineers, and the Soil Conservation Service.

K

K factor: A soil erodibility factor used in the universal soil loss equation that is a measure of the susceptibility of soil particles to detachment and transport by rainfall and run-off. Estimation of the factor takes several soil parameters into account, including: soil texture, percent of sand greater than 0.10 mm, soil organic matter content, soil structure, soil permeability, clay mineralogy, and coarse fragments. K factor values range from .02 to .64, the greater values indicating the highest susceptibilities to erosion.

key habitat: Specific areas within the geographic area occupied by a species in which are found those physical and biological features: 1) essential to the conservation of the species, and 2) which may require special management considerations or protection.

key viewpoint: The point(s) commonly in use, or potentially in use, where the view of a management activity is the most disclosing; the location that provides the means of studying the visual impact of alternatives to the landscape.

L

LC₅₀ (median lethal concentration): A calculated concentration of a chemical in air or water to which exposure for a specific length of time is expected to cause death in 50% of a defined experimental animal population.

LD₅₀ (median lethal dose): The dose of a chemical calculated to cause death in 50% of a defined experimental animal population over a specified observation period. The observation period is typically 14 days.

LU project lands: Privately owned submarginal farmlands incapable of producing sufficient income to support the family of a farm owner and purchased under Title III of the Bankhead-Jones Farm Tenant Act of July 22, 1937. These acquired lands became known as “Land Utilization Projects” and were subsequently transferred from jurisdiction of the U.S. Department of Agriculture to the U.S. Department of the Interior. They are now administered by the BLM.

land classification: When a tract of land has potential for either retention for multiple use management or for some form of disposal, or for more than one form of disposal, the relative

scarcity of the values involved and the availability of alternative means and sites for realization of those values will be considered. Long-term public benefits are weighed against more immediate or local benefits. The tract is then classified in a manner that will best promote the public interest.

land management: The intentional process of planning, organizing, programming, coordinating, directing, and controlling land use actions.

land tenure adjustments: Ownership or jurisdictional changes are referred to as Land Tenure Adjustments. To improve the manageability of the BLM lands and improve their usefulness to the public, the BLM has numerous authorities for repositioning lands into a more consolidated pattern, disposing of lands, and entering into cooperative management agreements. These land pattern improvements are completed primarily through the use of land exchanges, but also through land sales, jurisdictional transfers to other agencies, and through the use of cooperative management agreements and leases.

land treatment (grazing): All methods of artificial range improvement arid soil stabilization, such as reseeding, brush control (chemical and mechanical), pitting, furrowing, water spreading, etc.

land use allocation: The identification in a Resource Management Plan (RMP) of the activities and foreseeable development that are allowed, restricted, or excluded for all or part of the Planning Area, based upon desired future conditions.

Land Use Plan (LUP): A set of decisions that establish management direction for land within an administrative area, as prescribed under the planning provisions of the Federal Land Policy and Management Act (FLPMA); an assimilation of LUP-level decisions developed through the planning process outlined in 43 CFR 1600, regardless of the scale at which the decisions were developed. Generally, the term Resource Management Plan (RMP) is the preferred term for this type of document.

Land Use Plan Boundary: The geographic extent of a Resource Management Plan or Management Framework Plan.

Land Use Plan Decision: Establishes desired outcomes and actions needed in order to achieve them. Decisions are reached using the planning process in 43 CFR 1600. When they are presented to the public as proposed decisions, they can be protested to the BLM Director. They are not appealable to Interior Board of Land Appeals (IBLA).

Land Utilization Project Lands: Privately owned sub-marginal farmlands incapable of producing sufficient income in order to support the family of a farm owner and purchased under Title III of the Bankhead-Jones Farm Tenant Act of July 22, 1937. These acquired lands became known as Land Utilization Projects and were subsequently transferred from jurisdiction of the U.S. Department of Agriculture to the U.S. Department of the Interior. They are now administered by the BLM.

landscape: All the natural features (such as grasslands, hills, forest, and water) that distinguish one part of the earth's surface from another part; usually that portion of land that the eye can comprehend in a single view, including all of its natural characteristics.

landscape character: The combination of physical, biological, and cultural attributes that gives an area its visual and cultural identity. Each attribute contributes to the uniqueness of the landscape and gives a particular place meaning and value and helps to define a sense of place. Landscape character provides a frame of reference from which to determine scenic attractiveness and to measure scenic integrity and scenic sustainability.

large woody debris: Pieces of wood that are of a large enough size to affect stream channel morphology.

late season (grazing): Fall or late summer grazing.

leaching: Usually refers to the movement of chemicals through the soil by water; may also refer to the movement of herbicides out of leaves, stems, or roots into the air or soil.

lease: Section 302 of the Federal Land Policy and Management Act (FLPMA) provides the BLM's authority to issue leases for the use, occupancy, and development of the public lands. Leases are issued for purposes such as a commercial filming, advertising displays, commercial or noncommercial croplands, apiaries, livestock holding or feeding areas not

related to grazing permits and leases, harvesting of native or introduced species, temporary or permanent facilities for commercial purposes (does not include mining claims), residential occupancy, ski resorts, construction equipment storage sites, assembly yards, oil rig stacking sites, mining claim occupancy if the residential structures are not incidental to the mining operation, and water pipelines and well pumps related to irrigation and non-irrigation facilities. The regulations establishing procedures for the processing of these leases and permits are found in 43 Code of Federal Regulations (CFR) 2920.

Lease Notice (LN): Provides more-detailed information concerning limitations that already exist in law, lease terms, regulations, or operational orders. An LN also addresses special items that lessees should consider when planning operations; however, it does not impose additional restrictions.

leasable minerals: Those minerals or materials designated as leasable under the Mineral Leasing Act of 1920. They include coal, phosphate, asphalt, sulphur, potassium and sodium minerals, and oil and gas. Geothermal resources are also leasable under the Geothermal Steam Act of 1970.

lek (grouse): A specific location where male grouse congregate and strut to attract and breed with female grouse. Most male grouse return to the same lek every year.

lentic: Pertaining to standing, water such as lakes and ponds.

Level of Concern (LOC): The concentration in media or some other estimate of exposure above which there may be effects (impacts).

lichens: Organisms made up of specific algae and fungi, forming identifiable crusts on soil, rocks, tree, bark, and other surfaces. Lichens are primary producers in ecosystems. They contribute living material and nutrients, enrich the soil and increase soil moisture-holding capacity, and serve as food sources for certain animals. Lichens are slow growing and sensitive to chemical and physical disturbances.

lifeways: The manner and means by which a group of people lives; their way of life; components include language(s), subsistence strategies, religion, economic structure, physical mannerisms, and shared attitudes.

limited (travel management): Designated areas and trails where the use of off-road vehicles is subject to restrictions, such as limiting the number or types of vehicles allowed, dates and times of use (seasonal restrictions), limiting use to existing roads and trails, or limiting use to designated roads and trails. Under the designated roads and trails designation, use would be allowed only on roads and trails that are signed for use. Combinations of restrictions are possible, such as limiting use to certain types of vehicles during certain times of the year.

limited access route: A route restricted from general public use. Limited routes include administrative access allowing access for purposes of maintenance or operation; private land access; and temporary access used for a defined period of time (such as during the operation of an oil and gas well), then closed once the use is complete.

linkage area (lynx): An area that provides connectivity between blocks of lynx habitat. Linkage areas occur both within and between geographic areas, where basins, valleys or agricultural lands separate blocks of lynx habitat, or where lynx habitat naturally narrows between blocks.

lithic site: An archaeological site containing debris left from the manufacture, use, or maintenance of flaked stone tools.

litter: The uppermost layer of organic debris on the soil surface, which is essentially the freshly fallen or slightly decomposed vegetation material such as stems, leaves, twigs, and fruits.

live cull (forestry): Live trees that are 5.0 inches (dbh) and larger, that are 66 percent rotten or unable to produce a saw log.

livestock: Species of domestic animals including cattle, sheep, horses, burros, and goats.

locatable minerals: Minerals subject to exploration, development, and disposal by staking mining claims as authorized by the Mining Law of 1872, as amended. This includes deposits of gold, silver, and other uncommon minerals not subject to lease or sale.

long term: Generally, refers to a period longer than 10 years.

long-term impact: The impact could occur for an extended period after implementation of the alternative; could last several years or more.

long-term sustained-yield timber capacity (forestry): The highest wood yield that may be sustained under specified management intensities consistent with multiple-use objectives after stands have reached Desired Conditions.

low productivity forest lands (forestry): Woodlands and forest stands producing less than 20 cubic feet per acre per year.

lower montane: Generally, a terrestrial community that is found in drier and warmer environments than the montane terrestrial community. The lower montane community supports a unique clustering of wildlife species.

Lowest Observed Adverse Effect Level (LOAEL): The lowest dose of a chemical in a study, or group of studies, that produces statistically or biologically significant increases in frequency or severity of adverse effects between the exposed and control populations.

Lynx Analysis Units (LAUs): An area of at least the size used by an individual lynx, from about 25 to 50 mi² (LCAS). An LAU is a unit for which the impacts of a project would be analyzed; its boundaries should remain constant.

lynx habitat: Primarily coniferous forests that provide a prey base of snowshoe hare.

M

macrophytes: Terrestrial or aquatic plants that are large enough to be seen without the aid of a microscope.

major constraint: Refers to No Surface Occupancy (NSO) or other surface-disturbing activities stipulations placed on a mineral lease and, where appropriate, all surface-disturbing activities (and occupancy) associated with land use authorizations, permits, and leases issued on BLM-managed public lands.

management area: An area of land used in planning that consists of similar analysis area, has one prescription assigned, and may not be contiguous.

management direction: A statement of multiple use and other goals and objectives, along with the associated management prescriptions and standards and guidelines, to direct resource management.

Management Indicator Species (MIS): A species of wildlife, fish, or plant whose health and vigor are believed to accurately reflect the health and vigor of other species having similar habitat and protection needs to those of the selected indicator species.

Master Development Plan: Information common to multiple planned wells, including drilling plans, Surface Use Plans of Operations, and plans for future production.

Material Safety Data Sheet (MSDS): A compilation of information required under the Occupational Safety and Health Administration Communication Standard on the identity of hazardous chemicals, health and physical hazards, exposure limits, and precautions.

mechanical vegetation treatment: Includes mowing, chaining, chopping, drill seeding, and cutting vegetation in order to meet resource objective. Generally, mechanical treatments occur in areas where fuel loads or invasive species need to be reduced prior to prescribed fire application; when fire risk to resources is too great to use naturally started wildland fires or prescribed fires; or where opportunities exist for biomass utilization or timber harvest.

mechanized travel: Travel using self-propelled bicycles. This is sometimes included in the definition of non-motorized but making the distinction is often important.

mean annual increment and culmination of mean annual increment (forestry): The total increment of increase of volume of a stand (standing crop plus thinning) up to a given age divided by that age. Culmination of mean annual increment is the age in the growth cycle of an even-aged stand at which the average annual rate of increase of volume is at a maximum. In land management plans, mean annual increment is expressed in cubic measure and is based on the expected growth of stands, according to intensities and utilization guidelines in the plan document or set of documents.

Memorandum of Understanding (MOU): Documents an agreement reached among agencies.

metapopulation: A set of partially isolated populations belonging to the same species; the populations are able to exchange individuals and re-colonize sites in which the species has recently become extinct.

- microbial degradation:** The breakdown of a chemical substance into simpler components by bacteria or other microorganisms.
- microbiotic crust:** See biological crust.
- mineral:** Any naturally formed inorganic material, solid or fluid inorganic substance that can be extracted from the earth, any of various naturally occurring homogeneous substances (such as stone, coal, salt, sulfur, sand, petroleum, water, or natural gas) obtained for human use, usually from the ground. Under Federal laws, considered as locatable (subject to the general mining laws), leasable (subject to the Mineral Leasing Act of 1920), and salable (subject to the Materials Act of 1947).
- mineral entry:** The filing of a claim on public land to obtain the right to any locatable minerals it may contain.
- mineral estate:** The ownership of minerals, including rights necessary for access, exploration, development, mining, ore dressing, and transportation operations.
- mineral materials:** Materials (such as sand and gravel and common varieties of stone, pumice, pumicite, and clay) that are not obtainable under the mining or leasing laws, but that can be acquired under the Materials Act of 1947, as amended.
- minimize:** Apply best available technology, management practices, and scientific knowledge in order to reduce the magnitude, extent, and/or duration of impacts.
- minimum tool rule:** Apply only the minimum-impact policy, device, force, regulation, instrument, or practice to bring about a desired result.
- mining claim:** A parcel of land that a miner takes and holds for mining purposes, having acquired the right of possession by complying with the Mining Law and local laws and rules. A mining claim may contain as many adjoining locations as the locator may make or buy. There are 4 categories of mining claims: lode, placer, millsite, and tunnel site.
- Mining Law of 1872:** Provides for claiming and gaining title to locatable minerals on public lands; also referred to as the "General Mining Laws" or "Mining Laws."
- mitigation:** Steps taken to: 1) avoid an impact altogether by not taking a certain action or parts of an action; 2) minimize an impact by limiting the degree or magnitude of the action and its implementation; 3) rectify an impact by repairing, rehabilitating, or restoring the affected environment; 4) reduce or eliminate an impact over time by preserving and maintaining operations during the life of the action; and, 5) compensate for an impact by replacing or providing substitute resources or environments (40 CFR Part 1508.20).
- mitigation measure:** Actions taken to reduce or eliminate effects (impacts) from management actions, including: 1) avoiding the impact altogether by not taking certain action or parts of an action; 2) minimizing impacts by limiting the degree or magnitude of the action and its implementation; 3) rectifying the impacts by repairing, rehabilitating or restoring the affected environment; 4) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and 5) compensating for the impact by replacing or providing substitute resources or environments (40 CFR 1508.20).
- moderate constraint:** Refers to Controlled Surface Use (CSU) and Timing Limitation (TL) stipulations placed on a mineral lease and, where appropriate, all surface-disturbing activities associated with land use authorizations, permits, and leases issued on BLM-managed public lands.
- modification:** A visual quality objective meaning activities by humans may dominate the characteristic landscape but must, at the same time, utilize naturally established form, line, color, and texture. It should appear as a natural occurrence when viewed in foreground or middleground.
- monitoring:** The evaluation, on a sample basis, of management practices in order to determine how well objectives are being met, as well as the impacts of those management practices on the land and environment.
- montane:** Inhabiting the cool, moist ecological zone located near the timberline and usually dominated by evergreen trees.

- motorcycle:** Routes designated for motorcycles that are defined as motorized vehicles with 2 tires and with a seat designed to be straddled by the operator. Many of these routes are designed more for the off-highway type of motorcycles.
- motorized travel:** Moving by means of vehicles that are propelled by motors or batteries (such as cars, trucks, OHVs, motorcycles, golf carts, and boats).
- motorized vehicle:** Synonymous with off-highway vehicle (OHV). Examples of this type of vehicle include all-terrain vehicles, utility type vehicle, Sport Utility Vehicle, motorcycle, and snowmobiles.
- motorized wheeled vehicle:** Includes all types of motorized wheeled vehicles capable of or designed for, travel on or immediately over land or other natural terrain (motorcycles, four-wheel drive vehicles, all-terrain vehicles, sport utility vehicles, pickup trucks, etc.), and includes those vehicles that have the driving wheels moving inside endless tracks, or capable of conversion to such method of travel.
- motorized travel:** Travel that uses some form of motorized vehicles, including off-highway motorcycles (OHMs), off-high vehicles (OHVs), such as all-terrain vehicles (ATVs), and/or four-wheel and two-wheel drive full-size vehicles.
- multiple use:** The management of the public lands, and their various resource values, so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output.

N

- NEPA Process:** All measures necessary to comply with the requirements of Section 2 and Title 1 of the National Environmental Policy Act (NEPA); an interdisciplinary process, mandated by the NEPA that concentrates decision-making around issues, concerns, alternatives and the effects (impacts) of alternatives on the environment.
- National Ambient Air Quality Standards (NAAQS):** Standards set by the EPA for the maximum levels of pollutants that can exist in the outdoor air without unacceptable effects (impacts) on human health or the public welfare.
- National Backcountry Byways:** A program developed by the BLM to complement the National Scenic Byway Program. The BLM's Byways show enthusiasts the best the West has to offer (from waterfalls to geology sculpted by volcanoes, glaciers, and rivers.) Back Country Byways vary from narrow, graded roads, passable only during a few months of the year, to 2-lane paved highways providing year-round access.
- National Conservation Areas (NCAs):** Areas designated by Congress so that present and future generations of Americans can benefit from the conservation, protection, enhancement, use, and management of these areas by enjoying their natural, recreational, cultural, wildlife, aquatic, archeological, paleontological, historical, educational, and/or scientific resources and values.
- National Environmental Policy Act of 1969 (NEPA):** An Act which encourages productive and enjoyable harmony between man and his environment; promotes efforts to prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of people; enriches the understanding of the ecological systems and natural resources important to the Nation; and establishes a Council on Environmental Quality (CEQ).

- National Historic Trails:** Trails established to identify and protect historic routes; they follow as closely as possible the original trails or routes of travel of national historic significance.
- National Landscape Conservation System (NLCS):** A single system that encompasses some of the BLM's premier land designations. By putting these lands into an organized system, the BLM hopes to increase public awareness of these areas' scientific, cultural, educational, ecological, and other values.
- National Monument:** An area designated in order to protect objects of scientific and historic interest by public proclamation of the President under the Antiquities Act of 1906, or by the Congress for historic landmarks, historic and prehistoric structures, or other objects of historic or scientific interest situated upon the public lands; designation also provides for the management of these features and values.
- National Recreation Area:** An area designated by Congress to assure the conservation and protection of natural, scenic, historic, pastoral, and fish and wildlife values and to provide for the enhancement of recreational values.
- National Recreation Trails:** Trails established administratively by the Secretary of the Interior to provide for a variety of outdoor recreation uses in, or reasonably close to, urban areas. They often serve as connecting links between the National Historic Trails and National Scenic Trails.
- National Register of Historic Places (NRHP):** A listing of architectural, historical, archaeological, and cultural sites of local, State, or national significance, established by the Historic Preservation Act of 1966 (NHPA) and maintained by the National Park Service (NPS).
- National Scenic Areas:** Refers to the one national scenic area managed by the BLM: The Santa Rosa Mountains National Scenic Area in California, which encompasses approximately 101,000 acres. This area was designated by the Secretary of the Interior in 1990 to provide for the conservation, protection, and enhancement of scenic, recreation, and pastoral values.
- National Scenic Trails:** Trails established by an Act of Congress that are intended to provide for maximum outdoor recreation potential and for the conservation and enjoyment of nationally significant scenic, historical, natural, and cultural qualities of the areas through which these trails pass. National Scenic Trails may be located to represent desert, marsh, grassland, mountain, canyon, river, forest, and other areas, as well as land forms that exhibit significant characteristics of the physiographic regions of the nation.
- National Wild and Scenic Rivers:** Rivers designated in the National Wild and Scenic Rivers System (NWSRS) that are classified in 1 of 3 categories, depending upon the extent of development and accessibility along each section. In addition to being free flowing, these rivers and their immediate environments must possess at least 1 outstandingly remarkable value (ORV): scenic, recreational, geologic, fish and wildlife, historical, cultural, or other similar values.
- National Wild and Scenic Rivers System (NWSRS):** A system of nationally designated rivers and their immediate environments that have outstanding scenic, recreational, geologic, fish and wildlife, historic, cultural, and other similar values and are preserved in a free-flowing condition. The system consists of 3 types of streams: (1) recreation: rivers or sections of rivers that are readily accessible by road or railroad and that may have some development along their shorelines and may have undergone some impoundments or diversion in the past; (2) scenic: rivers or sections of rivers free of impoundments with shorelines or watersheds still largely undeveloped but accessible in places by roads; and (3) wild: rivers or sections of rivers free of impoundments and generally inaccessible except by trails, with watersheds or shorelines essentially primitive and waters unpolluted.
- native fish:** Fish species that are indigenous to a region's waters, as opposed to introduced or exotic fish.
- native species:** Species that historically occurred, or currently occur, in a particular ecosystem and were not introduced.

- natural community:** An assemblage of organisms indigenous to an area that is characterized by distinct combinations of species occupying a common ecological zone and interacting with one another.
- natural resources:** Water, soil, plants and animals, nutrients, and other resources produced by the earth's natural processes.
- naturalness:** Refers to an area that "generally appears to have been affected primarily by the forces of nature, with, the imprint of man's work substantially unnoticeable" (Set 2[c] of the Wilderness Act of 1964).
- net annual growth (forestry):** The average net annual increase in the volume of trees during the period between inventories. Components include the increment in net volume of trees at the beginning of the specific year surviving to its end, plus the net volume of trees reaching the minimum size class during the year, minus the volume of trees that died during the year, and minus the net volume of trees that became cull trees during the year.
- neurotoxicity:** Materials that affect nerve cells and may produce muscular, emotional, or behavioral abnormalities, impaired or abnormal motion, and other physiologic changes.
- neutralizer:** A type of inert ingredient added to an herbicide that modifies the effect of, or counteracts the properties of, something within the herbicide or spray solution.
- No Action Alternative:** The No Action Alternative is required by regulations implementing the National Environmental Policy Act (NEPA) (40 CFR 1502.14). The No Action Alternative provides a baseline for estimating the effects (impacts) of other alternatives. Where a project activity is being evaluated, the No Action Alternative is defined as one where no action or activity would take place.
- No Ground Disturbance (NGD):** Under this stipulation/restriction, the BLM would not allow any ground-disturbing activities.
- No Observed Adverse Effect Level (NOAEL):** The exposure level at which there are no statistically or biological significant differences in the frequency or severity of any adverse effect in the exposed or control populations.
- No Observed Effect Level (NOEL):** Exposure level at which there are no statistically or biological significant differences in the frequency or severity of any effect in the exposed or control populations.
- No Surface Occupancy (NSO):** Under this stipulation/restriction, the BLM would not allow any ground-disturbing activities from oil and gas leases.
- non-designated roads and trails:** Roads and trails that have not yet gone through site-specific travel planning in order to determine if they should be open, closed, or restricted to motorized vehicle use or roads, and trails that have gone through travel planning and determined that motorized vehicle use is not appropriate and is not allowed.
- non-functional:** Riparian areas that lack the soil, water, or vegetation attributes to function properly and that are highly susceptible to degradation.
- Non-functioning Condition (NFC):** Condition in which vegetation and ground cover are not maintaining soil conditions that can sustain natural biotic communities; riparian and wetland areas are considered to be in non-functioning condition when they do not provide adequate vegetation, landform, or large woody debris to dissipate stream energy associated with high flows and thus are not reducing erosion, improving water quality, or other normal characteristics of riparian areas. The absence of a floodplain may be an indicator of non-functioning condition.
- non-game species:** Those species of animals that are not managed as a sport hunting resource.
- non-motorized travel:** Travel not using a form of machinery, such as foot (hiking) or horseback riding.
- non-point source pollution:** Pollution whose source is not specific in location; the sources of the pollutant discharge are dispersed, not well defined or constant. Examples include sediments from logging activities and run-off from agricultural chemicals.
- non-selective herbicide:** An herbicide that is generally toxic to plants without regard to species.
- non-target:** Any plant, animal, or organism that a method of application is not aimed at, but may accidentally be injured by the application.

noxious weeds: Plants designated as noxious by the Secretary of Agriculture or by the responsible state official. They are usually an invasive species. They generally possess one or more of the following characteristics: aggressive and difficult to manage, poisonous, toxic, parasitic, a carrier or host of serious insects or disease, non-native, new, or not common to the United States. According to the Federal Noxious Weed Act (PL 93-639), a noxious weed is one that causes disease or has other adverse effects on people or their environment and therefore is detrimental to the agriculture and commerce of the United States and to the public health.

nutrient cycle: Ecological processes in which nutrients and elements such as carbon, phosphorous, nitrogen, and others, circulate among animals, plants, soils, and air.

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 to achieve identified goals.

off-highway motorcycle (OHM): Off-highway motorcycle, otherwise called dirt bikes.

off-highway vehicle (OHV): Any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding: (1) any non amphibious registered motorboat; (2) any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes; (3) any vehicle whose use is expressly authorized by the Authorized Officer, or otherwise officially approved; (4) vehicles in official use

off-highway vehicle area designations: BLM-managed public lands are designated as Open, Limited, or Closed for OHV use.

- **Open** -- Open designations are used for intensive OHV use areas where there are no special restrictions, or where there are no compelling resource protection needs, user conflicts, or public safety issues to warrant limiting cross-country travel (see 43 CFR 8340.05).
- **Limited** -- The limited designation is used where OHV use must be restricted in order to meet specific resource management objectives. Examples of limitations include: number or type of vehicles; time or season of use; permitted or licensed use only; use limited to designated roads and trails; or other limitations, if restrictions are necessary in order to meet resource management objectives, including certain competitive or intensive use areas that have special limitations (see 43 CFR 8340.05).
- **Closed** -- Areas or trails are designated closed if closure to all vehicular use is necessary in order to protect resources, promote visitor safety, or reduce use conflicts (see 43 CFR 8340.05).

off-road: Cross-country travel between designated routes.

off-road vehicle designations: Open: Designated areas and trails where off-road vehicles may be operated, subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343; or an area where all types of vehicle use is permitted at all times, subject to the standards in BLM Manuals 8341 and 8343. Limited: designated areas and trails where the use of off-road vehicles is subject to restrictions, such as limiting the number or types or vehicles allowed, dates and times of use (seasonal restrictions), limiting use to existing roads and trails, or limiting use to designated roads and trails. Under the designated roads and trails designation, use would be allowed only on roads and trails that are signed for use. Combinations of restrictions are possible, such as limiting use to certain types of vehicles during certain times of the year. Closed: Designated areas and trails where the use of off-road vehicles is permanently or temporarily prohibited. The use of off-road vehicles in closed areas may be allowed for certain reasons; however, such use shall be made only with the approval of the Authorized Officer.

old growth: Old growth forests represent the late stages of forest development and are primarily distinguished by old trees, large trees, snags, and large wood on the forest floor.

omnivore: An animal that eats a combination of meat and vegetation.

- open (travel management):** Areas where both cross-country and designated route travel is allowed by all types of vehicles, at all times, anywhere in the area, subject to the operating regulations and vehicle standards set forth in subparts 43 CFR 8341 and 8342.
- ordinary high-water mark:** That line on the shore established by the fluctuations of water and indicated by physical characteristics, such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.
- outcomes-focused management:** An approach to recreation management that focuses on the positive outcomes of engaging in recreational experiences; outcomes are categorized as individual, social, economic, and environmental.
- Outstandingly Remarkable Values (ORVs):** Values among those listed in Section 1(b) of the Wild and Scenic Rivers Act (WSRA): "scenic, recreational, geological, fish and wildlife, historical, cultural, or other similar values..." Other similar values, which may be considered, include ecological, biological or botanical, paleontological, hydrological, scientific or research values.
- over-grazing:** Continued heavy grazing that exceeds the recovery capacity of the plant community and creates a deteriorated rangeland.
- over-the-snow vehicle:** An over-snow vehicle is defined as a motor vehicle that is designed for use over snow that runs on a track or tracks and/or a ski or skis. An over-snow vehicle does not include machinery used strictly for the grooming of non-motorized trails.
- overstory:** The upper canopy layer.
- ozone:** A faint blue gas produced in the atmosphere from chemical reactions of such sources as burning coal, gasoline and other fuels, and chemicals found in products including solvents, paints, hairsprays, etc.
- P**
- pH:** A measure of how acidic or alkaline (basic) a solution is on a scale of 0 to 14 with 0 being very acidic, 14 being very alkaline, and 7 being neutral. The abbreviation stands for the potential of hydrogen.
- PM_{2.5}:** Fine particulates that measure 2.5 microns in diameter or less.
- PM₁₀:** Particulate matter that measures 10 microns in diameter or less.
- paleontological resources:** A work of nature consisting of or containing evidence of extinct multi-cellular beings and includes those works or classes of works of nature designated by the regulations as paleontological resources.
- paleontology:** A science dealing with the life of past geological periods as known from fossil remains.
- Particulate Matter (PM):** A complex mixture consisting of varying combinations of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These tiny particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, and dust.
- particulates:** Solid particles or liquid droplets suspended or carried in the air.
- passenger vehicle:** Two-wheel-drive, low-clearance vehicles.
- patent:** A grant made to an individual or group conveying fee simple title to selected public lands.
- Patented Claim:** A claim on which title has passed from the Federal government to the mining claimant under the Mining Law of 1872.
- pathogen:** An agent such as a fungus, virus, or bacterium that causes disease.
- perennial:** A plant that lives for 2 or more years.
- perennial stream:** Perennial streams carry flowing water continuously throughout the year, regardless of weather conditions; they exhibit well-defined geomorphological characteristics and in the absence of pollution, thermal modifications, or other manmade disturbances have the ability to support aquatic life. During hydrological drought conditions, the flow may be impaired.

- permit:** A revocable authorization to use public land for a specified purpose to for up to a specified amount of time.
- permit long (grazing):** Grazing for the duration of the permitted time with care taken not to overuse the resource.
- permitted livestock (grazing):** Livestock presently being grazed under a permit or those that were grazed under a permit during the preceding season, including their off-spring retained for herd replacement.
- permitted use (grazing):** The forage allocated by, or under the guidance of, an applicable Resource Management Plan (RMP) for livestock grazing in an allotment under a permit or lease, and is expressed in Animal Unit Months (AUMs) (43 CFR 4100.0-5).
- persistence:** Refers to the length of time a compound, once introduced into the environment, stays there.
- pest Infestation:** The occurrence of one or more pest species in an area or location where their numbers and impact are currently or potentially at intolerable levels; a sudden increase in destructiveness or population numbers of a pest species in a given area.
- petroglyph:** An image recorded on stone, usually by prehistoric peoples, by means of carving, pecking, or otherwise incised on natural rock surfaces.
- pictograph:** A symbol that represents an object or a concept by illustration.
- photodegradation:** The photochemical transformation of a molecule into lower molecular weight fragments, usually in an oxidation process. This term is widely used in the destruction (oxidation) of pollutants by ultraviolet-based processes.
- photolysis:** Chemical decomposition induced by light or other radiant energy.
- phytotoxicity:** The ability of a material such as a pesticide or fertilizer to cause injury to plants.
- piscivore:** Animal that feeds on fish.
- Plan Amendment:** In relation to Resource Management Plans (RMPs), the system that provides a step-by-step process for considering multiple resource values, resolving conflicts, and making resource management decisions.
- Planning Area:** The geographical area for which land use and resource management plans are developed and maintained. The Planning Area for this DRMP/DEIS extends across 5 Colorado counties; Eagle, Grand, Jackson, Larimer, and Summit.
- planning criteria:** The factors used to guide the development of the Resource Management Plan (RMP), or RMP Revision, designed to ensure that it is tailored to the issue previously identified, and to ensure that unnecessary data collection and analysis are avoided. Planning criteria are developed in order to guide the collection and use of inventory data and information, analysis of the management situation, design and formulation of alternatives, estimation of the impacts of alternatives, evaluation of alternatives, and selection of the Preferred Alternative.
- planning horizon:** The overall time period that spans all activities covered in the Resource Management Plan (RMP), and all future conditions and effects (impacts) of Proposed Actions that would influence the planning decisions. Typically, this is considered 50 years.
- planning issues:** Concerns, conflicts, and problems with the existing management of public lands. Frequently, issues are based upon how land uses affect resources. Some issues are concerned with how land uses can affect other land uses, or how the protection of resources affects land uses.
- plant community:** A vegetation complex, unique in its combination of plants, which occurs in particular locations under particular influences. A plant community is a reflection of integrated environmental influences on the site, such as soils, temperature, elevation, solar radiation, slope aspect, and precipitation.
- playas:** Flat land surfaces underlain by fine sediment or evaporate minerals deposited from a shallow lake on the floor of a topographic depression.
- population:** Organisms of the same species that occur in a particular place at a given time. In statistics, the aggregate of all units forming the subject of study; otherwise, a community of individuals that share a common gene pool.

- population adjusted dose:** The acute or chronic reference dose (RfD) divided by the Food Quality Protection Act (FQPA) Safety Factor.
- porosity:** The ratio of the volume of void space in a material (such as sedimentary rock or sediments) to the volume of its mass.
- Potential Natural Vegetation (PNV):** The stable vegetation community that could occupy a site under current climatic conditions without further influence by humans. Often used interchangeably with "Potential Natural Community."
- Potential Vegetation Group (PVG):** Potential vegetation types grouped on the basis of a similar general moisture or temperature environment.
- predator:** An organism that captures and feeds on parts or all of a living organism of another species.
- Preferred Alternative:** The agency's preferred alternative, one or more, that is identified in the environmental analysis document (40 CFR 1502.14).
- prehistoric community:** The collective physical remains or expressions of a cultural group's occupation and use of a geographical area during an established chronological period of time where residents had face-to-face contact with each other on a regular basis.
- prescribed burn:** The intentional application of fire to wildland fuels in either their natural or modified state under such conditions as to allow the fire to be confined to a predetermined area and, at the same time, to produce the intensity of heat and rate of spread required to further certain planned objectives (such as silviculture, wildlife management, reduction of fuel hazard, etc.).
- prescribed fire:** A management ignited wildland fire that burns under specified conditions and in predetermined area, and that produces the fire behavior and fire characteristics required to attain fire treatment and resource management objectives. (See prescribed burn.)
- prescribed fire projects:** Includes the BLM's efforts to utilize fire as a critical natural process in order to maintain and restore ecosystems, rangeland, and forestlands, and to reduce the hazardous buildup of fuels that may threaten healthy lands and public safety.
- prescribed fire treatments:** A pre-planned, management-ignited fire designed to meet specific resource objectives, such as reducing fuel loads, preparing a site for chemical treatment or seeding, or promoting vegetation regeneration.
- prescribed grazing:** The careful application of grazing or browsing prescriptions (such as specified grazing intensities, seasons, frequencies, livestock species, and degrees of selectivity) in order to achieve natural resource objectives. Livestock production is a secondary objective when using prescribed grazing as a natural resource management tool.
- Prevention of Significant Deterioration (PSD):** An EPA program in which State and/or Federal permits are required in order to restrict emissions from new or modified sources in places where air quality already meets or exceeds primary and secondary ambient air quality standards.
- primary succession:** The establishment and subsequent changes in a community from newly formed habitats without plants (such as sand dunes, lava flows, or newly exposed rock). Involves much modification of the environment by early colonists = pioneer species (such as lichens and mosses, beach grasses) which in terrestrial environments stabilize and enrich or even generate soil.
- primitive and unconfined recreation:** Non-motorized, non-mechanized (except as provided by law), and undeveloped types of recreational activities.
- primitive road:** A linear route managed for use by 4-wheel drive or high-clearance vehicles. Primitive roads do not normally meet any BLM road design standards.
- private land access:** A route that crosses BLM-managed public lands, but is used for the purpose of accessing private land. Generally, these routes would be administered under a Right-of-Way (ROW) grant.
- Probable Sale Quantity (PSQ) (forestry):** The PSQ is the amount of timber, measured in thousand board feet (MBF), that could be produced on BLM-managed public lands where commercial forest uses are considered appropriate. Calculations are based upon species, growth, mortality, land base, and sustainability. The PSQ does not include volume removed

for other purposes from other areas (such as recreation sites where hazard trees are removed). The PSQ also is not a commitment to offer for sale a specific level of timber volume.

productivity: The innate capacity of an environment to support plant and animal life over time.

Plant productivity is the rate of plant production within a given period of time. Soil productivity is the capacity of a soil to produce plant growth, due to the soil's chemical, physical, and biological properties.

Programmatic Environmental Assessment (PEA): An area-wide EA that provides an overview when a large-scale plan is being prepared for the management of federally administered lands on a regional basis.

Programmatic Environmental Impact Statement (PEIS): An EIS that establishes a broad management direction for an area by establishing a goal, objective, standard, management prescription and monitoring and evaluation requirement for different types of activities that are permitted. It also can establish what activities are not permitted within the specific area(s). This document does not mandate or authorize the permitted activities to proceed.

project: The whole of an action that has the potential for resulting in a physical change in the environment.

Project Area: The geographic area defining the scope of an environmental analysis document (EA or EIS), and the alternatives proposed by it.

project file: An assemblage of documents that contains all the information developed or used during an environmental analysis. This information may be summarized in an EA or an EIS. The project file becomes part of the Administrative Record (AR) for judicial review in case of legal action.

Proper Functioning Condition (PFC): (1) An element of the Fundamental of Rangeland Health for watersheds, and therefore a required element of State or regional standards and guidelines under 43 CFR 4180.2(b). (2) Condition in which vegetation and ground cover maintain soil conditions that can sustain natural biotic communities. (For riparian areas, the process of determining function is described in the BLM Technical Reference TR 1737-9). (3) riparian-wetland areas are functioning properly when adequate vegetation, landform, or large woody debris is present to dissipate stream energy associated with high water flows, thereby reducing erosion and improving water quality; filter sediment, capture bedload, and aid floodplain development; improve floodwater retention and groundwater recharge; develop root masses that stabilize stream banks against cutting action; develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and support greater biodiversity. The functioning condition of riparian-wetland areas is influenced by geomorphic features, soil, water, and vegetation. (4) Uplands function properly when the existing vegetation and ground cover maintain soil conditions capable of sustaining natural biotic communities. The functioning condition of uplands is influenced by geomorphic features, soil, water, and vegetation.

Proper Functioning Condition (PFC) for Lotic Areas: A riparian-wetland area is considered to be in proper functioning condition when adequate vegetation, landform, or large woody debris is present in order to:

- dissipate stream energy associated with high waterflow, thereby reducing erosion and improving water quality;
- filter sediment, capture bedload, and aid floodplain development;
- improve flood-water retention and ground-water recharge;
- develop root masses that stabilize streambanks against cutting action;
- develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and
- support greater biodiversity.

proponent: An Operator, commercial developer, or any other party or organization proposing an activity or use on BLM-managed public lands.

Proposed Action: A proposal by a Federal agency to authorize, recommend, or implement an action.

Proposed Alternative: The alternative identified in an environmental analysis document (EA or EIS) that has been selected by the agency as the most acceptable resolution to the problems identified in the Purpose and Need for the Proposed Action.

public domain lands: One category of public lands that have never left Federal ownership; also, lands in Federal ownership that were obtained by the government in exchange for public domain lands or for timber on public domain lands.

public lands: Any lands, or interest in lands, owned by the United States that are administered by the Secretary of the Interior through the BLM, without regard to how the United States acquired ownership, except for 1) lands located on the Outer Continental Shelf, and 2) lands held for the benefit of Indians, Aleuts, and Eskimos. Includes public domain and acquired lands.

public routes (travel management): These routes are open to the public, but may be restricted in terms of the type of travel allowed. For example, there are motorized and non-motorized public routes.

public scoping: A process whereby the public is given the opportunity to provide oral or written comments about the influence of a project on an individual, the community, and/or the environment.

Q

qualitative: Traits or characteristics that relate to quality and cannot be readily measured with numbers.

quantitative: Traits or characteristics that can be measured with numbers.

R

range analysis: Systematic acquisition and evaluation of rangeland resource data needed for allotment management planning and overall land management.

range improvement: An authorized physical modification or treatment designed to improve production of forage; change vegetation composition; control patterns of use; provide water; stabilize soil and water conditions; and restore, protect and improve the condition of rangeland ecosystems to benefit livestock, wild horses and burros, and fish and wildlife. The term includes, but is not limited to, structures, treatment projects, and use of mechanical devices or modifications achieved through mechanical means (43 CFR 4100).

rangeland (range): Land on which the native vegetation is predominantly grasses, grass-like plants, forbs, or shrubs; not forests.

rangeland condition: The present state of a rangeland relative to the potential of that rangeland, usually associated with the composition, abundance, and distribution of plant species relative to the potential natural community for that rangeland.

raptor: Bird of prey; includes eagles, hawks, falcons, and owls.

Reasonable Foreseeable Development (RFD) Scenario: The prediction of the type and amount of oil and gas activity that would occur in a given area. The prediction is based upon geologic factors, past history of drilling, projected demand for oil and gas, and industry interest.

receptor: An ecological entity exposed to a stressor.

reclamation: Returning disturbed land to a form and productivity that will be ecologically balanced and in conformity with a predetermined land management plan.

Record of Decision (ROD): A document separate from, but associated with, an Environmental Impact Statement (EIS), which states the decision, identifies alternatives (specifying which were environmentally preferable), and states whether all practicable means to avoid environmental harm from the alternative have been adopted, and if not, why not.

- recovery plan:** Identifies, justifies, and schedules the research and management actions necessary to reverse the decline of a species and ensure its long-term survival.
- recreation:** Use of leisure time to freely engage in activities in a variety of settings that provide personal satisfaction and enjoyment and contribute to the “renewal” and “refreshment” of one’s body, mind, and/or spirit. A behavior in which individuals engage in order to realize experiences that provide personal “renewal” or “refreshment.” The recreationist attains this experience by participating in preferred recreation activities in preferred surrounding or settings.
- Recreation and Public Purposes Act (R&PP) Act of 1926:** Recreation and Public Purposes Act provided for the lease and sale of public lands determined valuable for public purposes. The objective of the R&PP Act is to meet the needs of State and local government agencies and non-profit organizations by leasing or conveying public land required for recreation and public purpose uses. Examples of uses made of R&PP lands are parks and greenbelts, sanitary landfills, schools, religious facilities, and camps for youth groups. The act provides substantial cost-benefits for land acquisition and provides for recreation facilities or historical monuments at no cost.
- Recreation Area Management Plan (RAMP):** The RAMPs identify the specific recreation implementation actions to be taken in order to implement the decisions made in a Resource Management Plan, including specific recreation permitting or use allocation decisions. RAMPs must address the 4 components of implementation: management, administration, information, and monitoring.
- recreation experiences:** Psychological outcomes realized either by recreation-tourism participants as a direct result of their on-site leisure engagements and recreation-tourism activity participation or by non-participating community residents as a result of their interaction with visitors and guests within their community or interaction with the BLM and other public and private recreation-tourism providers and their actions.
- Recreation Management Zones:** Special Recreation Management Areas (SRMAs) may be subdivided into recreation management zones (RMZs) in order to further delineate specific recreation opportunities and recreation setting characteristics.
- Recreation Opportunity Spectrum (ROS):** One of the existing tools for classifying recreation environments (existing and desired) along a continuum ranging from primitive, low-use, and inconspicuous administration to urban, high-use, and a highly visible administrative presence. This continuum recognizes variation among various components of any landscape’s physical, social and administrative attributes; and resulting descriptions (of existing conditions) and prescriptions (of desired future conditions) define recreation setting character.
- Recreation Setting Characteristics (RSC):** RSCs are derived from the Recreation Opportunity Spectrum (ROS). It is a continuum divided into a spectrum of classes from primitive to urban recreation settings. The continuum of classes is characterized by 3 components; physical, social and operational.
- Recreation Settings:** The collective distinguishing attributes of landscapes that influence and, sometimes, actually determine what kinds of recreational opportunities are produced.
- Recreation Setting Characteristics:** The physical, social, and operational qualities and conditions of a recreation area, objectively defined along a continuum, ranging from primitive to urban.
- Recreation-tourism Market:** Recreation and tourism visitors and local residents who affect local governments and private sector businesses and the communities or other places where these customers originate (local, regional, national, or international). Based upon analysis of supply and demand, Resource Management Plans strategically identify primary recreation-tourism markets for each special recreation management area: destination, community, or undeveloped.
- Recreation Use Permits:** Authorizations for use of developed facilities that meet the fee criteria established by the Land and Water Conservation Fund Act of 1964, as amended, or subsequent authority (such as the Pilot Fee Demonstration Program). Recreation Use Permits are issued in order to ensure that U.S. residents receive a fair and equitable return

for the use of those facilities to help recover the cost of construction, operation, maintenance, and management of the permits.

Recreation Visitor Days (RVDs): One 12-hour period of recreation. It can be one person for 12 hours, 2 people for 6 hours, 12 people for 1 hour, etc.

recreational opportunities: The combination of recreation activities, settings, and experiences provided by the area.

recreational river: Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

reference dose (RfD): An estimate (with uncertainty spanning perhaps an order of magnitude) of a daily oral exposure to the human population (including sensitive subgroups) that is likely to not result in an appreciable risk of deleterious effects during a lifetime. It is derived from the no-observed-adverse-effect-level, the lowest-observed-adverse-effect-level, or a benchmark dose. Uncertainty factors are generally applied when developing the reference dose to reflect the limitations of the data used.

reference period: The period of indigenous settlement from about 1500 to the late 1800s. It is a time when broad-scale climatic conditions were similar to those of today, but Euro-American settlers had not yet introduced the sweeping ecological changes (including timber harvest, livestock grazing, fire suppression, water diversions, dams, and roads) that have greatly altered many Rocky Mountain landscapes.

registered herbicide: All herbicides sold or distributed in the United States must be registered by the EPA, based upon scientific studies, showing that they can be used without posing unreasonable risks to people or the environment.

remnant plant species: A remnant or fragment of the vegetation of an area that remains from a former period when the vegetation was more widely distributed.

Research Natural Areas (RNAs): Special management areas designated either by Congress or by a public or private agency in order to preserve and protect typical or unusual ecological communities, associations, phenomena, characteristics, or natural features or processes for scientific and educational purposes. They are established and managed in order to protect ecological processes, conserve biological diversity, and provide opportunities for observation for research and education.

resident fish: Fish that spend their entire life in freshwater (such as bull trout).

residue: The quantity of an herbicide or its metabolites remaining in or on soil, water, plants, animals, or surfaces.

resilience: The ability of a system to respond to disturbances. Resiliency is one of the properties that enable the system to persist in many different states or successional stages. In human communities, this refers to the ability of a community to respond to externally induced changes such as larger economic forces.

resilient: The capability to withstand or recover from disturbance or change.

Resource Management Plan (RMP): A BLM planning document, prepared in accordance with Section 202 of the Federal Land Policy and Management Act (FLPMA) that establishes, for a given area of land, land-use allocations, coordination guidelines for multiple-use, objectives, and actions to be achieved. It presents systematic guidelines for making resource management decisions for a Planning Area. An RMP is based on an analysis of an area's resources, existing management, and capability for alternative uses. RMPs are issue oriented and developed by an Interdisciplinary (ID) Team with public participation.

rest rotation (grazing): Rotation that rests pastures that have been grazed early the prior year or that have been identified as needing rest for resource reasons.

restoration: The process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed. It is an intentional activity that initiates or accelerates the recovery of an ecosystem with respect to its health, integrity, and sustainability.

restoration Watershed: Restoration watersheds are identified because biological and physical processes and functions do not reflect natural conditions due to past and long-term land disturbances. Generally, the majority of ownership in the watershed or sub-watershed is

comprised of BLM, U.S. Forest Service (USFS), or Colorado Division of Wildlife (CDOW) areas; or is based upon the fisheries value and miles of stream flowing across BLM-managed public lands.

restore: To bring back to a former or original or specific desired condition or appearance.

retard: Measurably slow attainment of any identified objective level that is worse than the objective standard; degradation of the physical/biological process or conditions that determine objective standards would be considered to retard attainment of specific objective standard.

revegetation: Establishing or re-establishing desirable plants on areas where desirable plants are absent or of inadequate density, by management alone (natural revegetation) or by seeding or transplanting (artificial revegetation).

Right-of-Way (ROW): A situation in which, although a parcel of land has a specific private or public owner, some other party or the public at large has a legal right to traverse that land in some specified manner. Public lands are often authorized to be used or occupied for specific purposes pursuant to a ROW grant, which are in the public interest and which require ROWs over, upon, under, or through such lands.

riparian: A type of ecological community that occurs adjacent to streams and rivers. It is characterized by certain types of vegetation, soils, hydrology and fauna and requires free or unbound water or conditions more moist than that normally found in the area.

riparian/aquatic system: Interacting system between aquatic and terrestrial situations. identified by a stream channel and distinctive vegetation that requires or tolerates free or unbound water.

riparian area: A form of wetland transition between permanently saturated wetlands and upland areas. Riparian areas exhibit vegetation or physical characteristics that reflect the influence of permanent surface or subsurface water. Typical riparian areas include lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels. Excluded are ephemeral streams or washes that lack vegetation and depend on free water in the soil.

riparian zone: An area one-quarter mile wide encompassing riparian and adjacent vegetation.

risk: The likelihood that a given exposure to an item or substance that presents a certain hazard will produce illness or injury.

risk assessment: The process of gathering data and making assumptions to estimate short- and long-term harmful impacts on human health or the environment from particular products or activities.

road: A named county route of travel.

Roadless Area: A USFS area that 1) is larger than 5,000 acres, or if smaller than 5,000 acres, contiguous to a designated wilderness or primitive area; 2) contains no roads; and 3) has been inventoried for possible inclusion in the wilderness preservation system.

Roadless Area Review and Evaluation (RARE II): For the USFS, roadless areas inventoried in the second roadless area review and evaluation (36 CFR 219.17).

rock art: Petroglyphs (carvings) or pictographs (paintings) used to depict history and culture.

rotation (forestry): The number of years (including the regeneration period) required to establish and grow timber crops to a specified condition or maturity under even-aged management. Selected integrated prescriptions in the land management plan provide the basis for the rotation age. This is used to calculate the contribution to long-term sustained-yield capacity for the Planning Area from lands suitable for timber production.

rotation (grazing): The movement of livestock between pastures in an allotment for the permitted time.

rotation age (forestry): The period of years between when a forest stand (primarily even-aged) is established, and when it receives its final harvest. This time period is an administrative decision based on economics, site condition, growth rates, and other factors

route: A group or set of roads, trails and primitive roads that represent less than 100 percent (excludes non-designated routes) of the BLM transportation system. In general, components of the transportation system are described as routes.

route types: The BLM has adopted 3 Travel and Transportation System route types:

- **Roads** -- Roads are defined as a linear route managed for use by low-clearance vehicles having 4 or more wheels, and maintained for regular and continuous use.
- **Primitive roads** -- Primitive roads are types of transportation-related linear features that are used by 4-wheel drive or high-clearance vehicles or UTVs and that do not, customarily, meet any BLM road design standards.
- **Trails** -- Trails are linear routes managed for human-powered, stock, or OHV forms of transportation, or for historical or heritage values. Generally, trails are not managed for use by 4-wheel-drive or high-clearance vehicles.

run-off: That part of precipitation, as well as any other flow contributions, that appears in surface streams, either perennial or intermittent.

S

salinity: Refers to the solids, such as sodium chloride (table salt) and alkali metals, that are dissolved in water.

salmonids: Fishes of the family Salmonidae, including salmon, trout, chars, whitefish, ciscoes, and grayling.

Scenic Byways: Highway routes, which have roadsides or corridors of special aesthetic, cultural, or historic value. An essential part of the highway is its scenic corridor. The corridor may contain outstanding scenic vistas, unusual geologic features, or other natural elements.

Scenic River: A river or section of a river that is free of impoundments and whose shorelines are largely undeveloped but accessible in places by routes. A definition used in determining Wild and Scenic Rivers (WSR) designations.

scoping: The procedures by which the BLM (or other Federal land management agency) determine the extent of analysis necessary for a Proposed Action (including the range of actions, alternatives, and impacts to be addressed; identification of significant issues related to a Proposed Action; and establishing the depth of environmental analysis, data, and task assignments needed). Scoping includes gathering interagency data, as well as eliciting public comment on the proposal, evaluating concerns, and developing alternatives for consideration.

scrubland: Areas dominated by woody shrubs. These areas include sagebrush, salt desert shrub, and mountain shrub vegetation types.

season of use (grazing): The time during which livestock grazing is permitted on a given range allotment, as specified in the grazing permit.

seasonal closure: Area or road closed part of the year.

secondary succession: Results from changes in an area that previously had a vegetation community where disturbance (such as surface disturbance, insect pest or disease) reset the stage of the community to an earlier point in the succession process but did not reset it to the primary succession stage.

Section 106 Consultation: Under the Endangered Species Act (ESA), refers to consultation between the BLM (or other Federal agency), the Colorado State Historic Preservation Officer (SHPO), Native American tribes, and the Advisory Council on Historic Preservation (ACHP), in accordance with Section 106 of the National Historic Preservation Act (NHPA) following procedures specified in 36 CFR 800 or the State Protocol Agreement.

Section 3 (grazing): Lands administered under Section 3 of the Taylor Grazing Act. This section of the law provided for the lease of grazing district lands to landowners and homesteaders in or adjacent to the reserves first and issuance of 1 to 10 year leases.

Section 404 Permit: A permit issued by the U.S. Army Corps of Engineers, as dictated in Section 404 of the Clean Water Act (CWA), that specifies that anyone wishing to place dredged or fill materials into the waters of the United States and adjacent jurisdictional wetlands shall apply to the U.S. Army Corps of Engineers for approval.

Section 15 (grazing): Lands administered under Section 15 of the Taylor Grazing Act. Under Section 15, public lands outside of grazing districts could be leased to ranchers with contiguous property.

- sediment:** Material suspended in liquid or air. Any material carried in suspension by water, which will ultimately settle to the bottom. Sediment has two main sources: from the channel area itself and from disturbed sites; unweathered geologic materials generally laid down by or within waterbodies; the rocks, sand, mud, silt, and clay at the bottom and along the edge of lakes, streams, and oceans.
- sedimentation:** The process of forming or depositing sediment; letting solids settle out of wastewater by gravity during treatment.
- seeding:** Seeding is a vegetation treatment that includes the application of grass, forb, or shrub seed, either aerially or from the ground. In areas of gentle terrain, ground applications of seed are often accomplished with a rangeland drill. Seeding allows the establishment of native species or placeholder species and restoration of disturbed areas to a perennial-dominated cover type, thereby decreasing the risk of subsequent invasion by exotic plant species. Seeding would be used primarily as a follow-up treatment in areas where disturbance or the previously described treatments have removed exotic plant species and their residue.
- selective herbicide:** A chemical designed to affect only certain types of plants, leaving other plants unharmed.
- self-sustaining population:** A population of organisms that has appropriate characteristics, including the abundance and distribution of individuals of the population, to provide for its long-term persistence.
- semi-arid:** Moderately dry; region or climate where moisture is normally greater than under arid conditions, but still limits the production of vegetation.
- Sensitive Species:** 1) Plant or animal species susceptible or vulnerable to activity impacts or habitat alterations; 2) Species that have appeared in the Federal Register as proposed for classification or are under consideration for official listing as Endangered or Threatened Species.
- sensitivity level:** A particular degree or measure of viewer interest in the scenic qualities of the landscape.
- seral:** The stage of succession of a plant community that is transitional. If left alone, the seral stage will give way to another plant community that represents a further stage of succession.
- severe winter range:** Areas within the winter range where 90 percent of the individuals are located when annual snow pack is at its maximum and/or temperatures are at a minimum in the 2 worst winters out of 10.
- short-term impacts:** Impacts occurring during project construction and operation, and normally ceasing upon project closure and reclamation. For each resource the definition of short-term may vary.
- shrub:** A plant with persistent woody stems and relatively low growth form; usually, produces several basal shoots as opposed to a single bole; differs from a tree by its low stature and non-arborescent form.
- significant:** As used in the NEPA environmental analysis process, requires consideration of both context and intensity. Context means that the significance of a Proposed Action must be analyzed in several contexts, such as society as a whole and the affected region, interests, and locality. Intensity refers to the severity of impacts (40 CFR 1508.27). The description of an impact that exceeds a certain threshold level. Requires consideration of both context and intensity. The significance of an action must be analyzed in several contexts, such as society as a whole, and the affected region, interests, and locality. Intensity refers to the severity of impacts, which should be weighted along with the likelihood of its occurrence.
- significant effect (impact):** A substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, water, minerals, flora, fauna, and objects of historic or aesthetic significance.
- significant fossils:** Any vertebrate fossil remains or site with fossils of exceptional preservation or context.
- silvicultural system:** A planned series of treatments for tending, harvesting, and re-establishing a stand. The system name is based on the number of age classes (coppice, even-aged, two-

aged, uneven-aged) or the regeneration method (clear-cutting, seed tree, shelterwood, selection, coppice) used.

single-track trail: Trails that are wide enough for just 1 motorcycle or mountain bike at a time, with a maximum tread width of 24 inches.

site (archaeology): A physical location of past human activity with evidence of purposeful or patterned human behavior beyond the level of one or very few accidentally deposited artifacts.

snag (forestry): A standing dead tree, usually larger than 5 feet tall and 6 inches in diameter at breast height.

sociocultural: Of, relating to, or involving a combination of social and cultural factors.

socioeconomic: Pertaining to, or signifying the combination or interaction of social and economic factors.

soil compaction: The compression of the soil profile from surface pressure, resulting in reduced air space, lower water holding capacity, and decreased plant root penetrability.

soil horizon: A layer of soil material approximately parallel to the land surface that differs from adjacent genetically related layers in physical, chemical, and biological properties.

soil productivity: The inherent capacity of a soil to support the growth of specified plants or plant communities.

solitude (recreation): The state of being alone or remote from habitations; isolation. A lonely or secluded place. Factors contributing to opportunities for solitude may include size, natural screening, topographic relief, vistas, physiographic variety, and the ability of the user to find a secluded spot.

Special Recreation Management Area (SRMA): A public lands unit identified in Resource Management Plans (RMPS) to direct recreation funding and personnel to fulfill commitments made to provide specific, structured recreation opportunities (including activity, experience, and benefit opportunities). RMP decisions, and subsequent implementing actions, for recreation in each SRMA are geared to a strategically identified primary market: destination, community, or undeveloped.

Special Recreation Permit (SRP): A permit required for any activity that is recreational in nature and involves groups of people. Generally, these permits are for guided recreation activities provided by outfitters to the public. These include guided river trips, hunting trips, and jeep tours. However, other commercial recreational activities such as advertising or selling food or merchandise would also require an SRP. Certain organized group events also require an SRP. An organized group event is a recreation event that is not commercial and is not competitive. Examples of organized group events include scout campouts, club rides or hikes, church or company picnics, or large family reunions.

Special Status Species: Refers to federally listed Threatened or Endangered Species, Federal Candidate Species, species recognized as requiring special protection by State agencies, and species managed as Sensitive Species by the BLM (or other Federal land management agencies).

species: Any member of the currently accepted and scientifically defined plant or animal kingdoms of organisms; a unit of classification of plants and animals consisting of the largest and most inclusive array of sexually reproducing and cross-fertilizing individuals which share a common gene pool.

Species of Concern: Species for which the Responsible Official determines that management actions may be necessary in order to prevent listing under the Endangered Species Act (ESA).

Species of Interest: Species for which the Responsible Official determines that management actions may be necessary or desirable to achieve ecological or other multiple-use objectives.

split-estate: Lands where surface ownership differs from subsurface, such as private land surface ownership overlaying subsurface Federal mineral rights.

split season (grazing): Removing livestock from the allotment and returning them later in the year within the permitted time.

- spot treatment:** An application of an herbicide to a small selected area as opposed to broadcast application.
- stabilizer:** A type of inert ingredient added to a commercial pesticide that makes the mixture more stable.
- stand (forestry):** A vegetation community sufficiently uniform in composition, age, spatial arrangement, or condition to be distinguishable from an adjacent vegetation community.
- Standard:** A description of the physical and biological conditions or degree of function required for healthy, sustainable lands (such as Public Land Health Standards); to be expressed as a desired outcome (goal).
- Standard Operating Procedures (SOPs):** Procedures that would be followed by the BLM in order to ensure that those risks to human health and the environment from treatment actions are kept to a minimum.
- Standard Terms and Conditions (minerals):** Standard terms and conditions for oil and gas leasing provide the ability for the BLM to relocate proposed operations up to 200 meters, and to prohibit surface-disturbing operations for a period not to exceed 60 days.
- State Implementation Plan (SIP):** A detailed description of the programs a State will use to carry out its responsibilities under the Clean Air Act (CAA). State implementation plans are collections of the regulations used by a State in order to reduce air pollution.
- stationary source (air quality):** Refers to a stationary source of emissions; Prevention of Significant Deterioration (PSD) Permits are required for major new stationary sources of emissions that emit 100 tons or more per year of carbon monoxide, sulphur dioxide, nitrogen dioxide, ozone, or particulate matter.
- step-down:** Refers to the process of applying broad-scale science findings and land use decisions to site-specific areas using a hierarchical approach of understanding current resource conditions, risks, and opportunities.
- stipulation:** A requirement that is part of the terms of a mineral lease and, where appropriate, applies to all surface-disturbing activities (and occupancy) associated with land use authorizations, permits, and leases issued on BLM-managed public lands. For this DRMP/DEIS, 3 types of stipulations could be applied to land use authorizations: 1) major constraints, including No Surface Occupancy (NSO) or other surface-disturbing activities; 2) moderate constraints, including Controlled Surface Use (CSU); and 3) moderate constraints, including Timing Limitations (TL).
- stressor:** Any event or situation that precipitates a change.
- stocking (forestry):** The degree to which trees occupy the land, measured by basal area or the number of trees per given area.
- Streamside Management Zone:** Land adjacent to a waterbody where activities on land are likely to affect water quality.
- structure (forestry):** The horizontal and vertical distribution of components in a vegetation community including the height, diameter, crown layers, and stems of the plants, and the amount and arrangement of snags and down woody material.
- subalpine:** Generally, a terrestrial community found in harsher environments than the montane terrestrial community. Subalpine communities are, generally, colder than montane and support a unique clustering of wildlife species.
- subchronic:** The effects observed from doses that are of intermediate duration, usually 90 days.
- subsistence:** Customary and traditional uses of wild renewable resources (plants and animals) for food, shelter, fuel, clothing, tools, etc.
- succession:** A change in structure and composition of plant and animal communities over time. This change does not always occur in a predictable and orderly manner. Change can be a response to random or chaotically occurring disturbances.
- suitability:** The appropriateness of a particular area of land for applying certain resource management practices, as determined by an analysis of the existing resource condition of that land. A unit of land may be suitable for a variety of management practices.
- suitable habitat:** Habitat that currently has the attributes needed for a given species.

- Suitable River:** A river segment found, through administrative study by an appropriate agency, to meet the criteria for designation as a component of the National Wild and Scenic Rivers System (NWSRS), specified in Section 4(a) of the Wild and Scenic Rivers Act (WSRA).
- summer range:** A range, usually at higher elevation, used by deer and elk during the summer; a summer range is usually much more extensive than a winter range.
- surface-disturbing activities:** Activities that normally result in more than negligible (immeasurable, not readily noticeable) disturbance to vegetation and soils on public lands and accelerate the natural erosive process. Surface disturbances could require reclamation and, normally, involve use and/or occupancy of the surface resulting in disturbance to soils and vegetation.
- surfactant:** A material that improves the emulsifying, dispersing, spreading, wetting, or other surface-modifying properties of liquids.
- surrogate:** A substitute or stand-in.
- sustainability:** Obtaining yields and services from ecosystems without irreversibly affecting their resilience, natural resistance to change, or ability to meet the needs of future generations.
- sustained yield:** The achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use and without impairment of the productivity of the land.
- sustained yield (forestry):** sustained yield of wood fiber that properly harvested and mitigated, would sustain the underlying ecosystem processes.
- synergistic:** A type of cumulative impact where total effect is greater than the sum of the effects taken independently.

T

- take:** To harass, harm, pursue, hunt, shoot, kill, trap, capture, or collect a species listed under the Endangered Species Act (ESA), or to attempt to engage in any such conduct.
- tank mixture:** The mixture of 2 or more compatible herbicides in a spray tank in order to apply them simultaneously.
- target species:** Plant species of competing vegetation that is controlled in favor of desired species.
- temporary access:** A route used for a specific period of time (such as during the operation of an oil and gas well), then closed once the use is complete.
- teratogenic:** Causing structural defects that affect the development of an organism; causing birth defects.
- terrestrial:** Of or relating to the earth, soil, or land; inhabiting the earth or land.
- terrestrial ecosystem:** Ecosystems that occur in relatively dry, upland landscape positions.
- thermal cover:** Vegetation used by animals to modify the adverse effects of weather; a forest stand that is at least 40 feet in height with tree canopy cover of at least 70 percent provides thermal cover. These stand conditions are achieved in closed sapling-pole stands and by all older stands unless the canopy cover is reduced below 70 percent. Deciduous stands may serve as thermal cover in summer, but not in winter.
- Threatened Species:** A plant or animal species likely to become an Endangered Species throughout all or a significant portion of its range within the foreseeable future.
- threshold:** A dose or exposure below which there is no apparent or measurable adverse effect.
- tiering:** The use of a previously written environmental document with a broad scope to cover discussion of issues common to both.
- timber:** Standing trees, downed trees, or logs that are capable of being measured in board feet.
- timber harvesting:** The removal of trees for wood fiber use and other multiple-use purposes.
- timber production:** The purposeful growing, tending, harvesting, and regeneration of regulated crops of trees to be cut into logs, bolts, or other round sections for industrial or consumer use.
- Timing Limitation (TL) Stipulation:** Areas closed to oil and gas exploration and development and other surface-disturbing activities during identified time frames. This stipulation would not apply to operation and maintenance activities, including associated vehicle travel, unless otherwise specified.

Total Dissolved Solids: Salt, or an aggregate of carbonates, bicarbonates, chlorides, sulfates, phosphates, and nitrates of calcium, magnesium, manganese, sodium, potassium, and other actions that form salts.

Total Maximum Daily Load (TMDL): An estimate of the total quantity of pollutants (from all sources: point, non-point, and natural) that may be allowed into waters without exceeding applicable water quality criteria.

Total Suspended Particles (TSP): A method of monitoring airborne particulate matter by total weight.

toxicity: A characteristic of a substance that makes it poisonous.

toxicokinetics: The process of the uptake of potentially toxic substances by the body, the biotransformation they undergo, the distribution of the substances and their metabolites in the tissues, and the elimination of the substances and their metabolites from the body.

traditional cultural property: A property that derives significance from traditional values associated with it by a social or cultural group (such as a Native American Indian tribe, or local community). A traditional cultural property may be eligible for the National Register of Historic Places (NHRP) if it meets the criteria and criteria exception in 36 CFR60.4.

traditional use: Long-standing, socially conveyed, customary patterns of thought, cultural expression, and behavior (such as religious beliefs and practices, social customs, and land or resource uses); generally, traditions shared within a social and/or cultural group and span generations. Usually, traditional uses are reserved rights resulting from treaty and/or agreements with Native American groups.

trail: A linear route managed for human-power (hiking or bicycling), stock (equestrian), or off-highway vehicle forms of transportation or for historical or heritage values.

transpiration: Water loss from plants during photosynthesis.

transportation linear features: "Linear features" represents the broadest category of physical disturbance (planned and unplanned) on BLM-managed public lands. Transportation related linear features include engineered roads and trails, as well as user-defined, non-engineered roads and trails created as a result of the public use of BLM-managed public lands. Linear features may include roads and trails identified for closure or removal, as well as those that make up the BLM's defined Transportation System.

Transportation System: The sum of the BLM's recognized inventory of linear features (roads, primitive roads, and trails) formally recognized, designated, and approved as part of the BLM's Transportation System.

Travel Management Areas: Polygons or delineated areas where a rational approach has been taken in order to classify areas as Open, Closed or Limited, and have identified and/or designated a network of roads, trails, ways, and other routes that provide for public access and travel across the Planning Area. All designated travel routes within Travel Management Areas should have a clearly identified need and purpose as well as clearly defined activity types, modes of travel, and seasons or timeframes for allowable access or other limitations.

trespass: Any unauthorized use of public land.

tribe: Term used to designate any Native American tribe, band, nation, or other organized group or community (including any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act) that is recognized as eligible for the special programs and services provided by the U.S. to Native Americans due to their status as Native Americans.

U

understory: Plants that grow beneath the canopy of other plants; usually refers to grasses, forbs, and low shrubs under a tree or shrub canopy.

undertaking: A term defined in the National Historic Preservation Act (NHPA) as "A project, activity, or program funded in whole or part, under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; those requiring a Federal permit, license, or

approval; and those subject to State or local regulation administered pursuant to a delegation or approval by a Federal agency”.

undesirable plants: Species classified as undesirable, noxious, harmful, exotic, injurious, or poisonous under State or Federal law, but not including species listed as Endangered by the Endangered Species Act (ESA), or species indigenous to the Planning Area.

unique plant associations: Plant communities that 1) occur only in Colorado; 2) are common elsewhere, but are represented by only a few occurrences in Colorado; 3) could easily be eliminated from Colorado; or 4) are considered to be in their natural state.

unplanned natural fire managed for resource benefit: A vegetation treatment that involves taking advantage of a naturally ignited wildland fire in an area where fire would benefit resources.

upland: The portion of the landscape above the valley floor or stream.

uneven-aged management (forestry): Actions resulting in the creation of stands in which trees of different ages grow together. Cutting is usually regulated by specifying the number or proportion of trees of particular size to retain within each cut area, thereby maintaining a planned distribution of size classes.

ungulate: A hoofed mammal such as a deer, elk, horse, sheep, or cow.

utility corridor: Tract of land varying in width forming passageway through which various commodities (such as oil, gas, and electricity) are transported.

utility type (or terrain) vehicle (UTV): Any recreational motor vehicle other than an ATV, motorbike, or snowmobile designed for, and capable of, travel over designated unpaved roads; traveling on 4 or more low-pressure tires; with a maximum width of less than 74 inches; usually, a maximum weight of less than 2,000 pounds, or having a wheelbase of 94 inches or less. UTVs do not include vehicles specially designed to carry a person with disabilities.

V

valid existing rights: Any lease established (and valid) prior to a new authorization, change in land designation, or in regulation.

vascular plants: Plants that have specialized tissues which conduct nutrients, water, and sugars, along with other specialized parts such as roots, stems, and reproductive structures. Vascular plants include flowering plants, ferns, shrubs, grasses, and trees.

vegetation manipulation: Planned alteration of vegetation communities through the use of mechanical, chemical, seeding, and or prescribed fire or wildland fire use in order to achieve desired resource objectives.

vegetation treatment methods: There are 5 types of vegetation treatments that may be used: wildland fire use, prescribed fire treatments, chemical, mechanical, and seeding.

vegetation type: A plant community with immediately distinguishable characteristics based upon, and named after, the apparent dominant plant species.

vertebrate: An animal with a backbone. Fishes, amphibians, reptiles, birds, and mammals are vertebrates.

viable populations: A wildlife population of sufficient size to maintain its existence over time in spite of normal fluctuations in population levels.

viewshed: The panorama from a given viewpoint that encompasses the visual landscape, including everything visible within a 360-degree radius.

visibility (air quality): A measurement of the ability to see and identify objects at different distances.

Visitor Day: Twelve visitor hours, which may be aggregated by one or more persons in single or multiple visits.

Visitor Use: A term used in recreation management to describe visitor use of a resource for inspiration, stimulation, solitude, relaxation, education, pleasure, or satisfaction.

visual resources: The visible physical features of a landscape (topography, water, vegetation, animals, structures, and other features) that constitute the scenery of an area.

Visual Resource Inventory Classes: Visual Resource Inventory classes are assigned through the inventory process. Generally, these are assigned based upon a combination of scenic quality, sensitivity level, and distance zones. Inventory classes are informational in nature and provide the basis for considering visual values in the RMP process. They do not establish management direction, and are not used as a basis for constraining or limiting surface disturbing activities.

Visual Resource Management (VRM): The system by which BLM classifies and manages scenic values and visual quality of public lands. The system is based upon research that has produced ways of assessing aesthetic qualities of the landscape in objective terms. After inventory and evaluation, lands are given relative visual ratings, which determine the amount of modification allowed for the basic elements of the landscape.

Visual Resource Management (VRM) Classes: Categories assigned to public lands based upon scenic quality, sensitivity level, and distance zones. Visual resource management classes are assigned through RMPs. The assignment of visual management classes is, ultimately, based upon the management decisions made in RMPs. There are 4 classes. Each class has an objective that prescribes the amount of change allowed in the characteristic landscape.

Visual Resource Management Class I Objective: The objective of this class is 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.

Visual Resource Management Class II Objective: The objective of this class is 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.

Visual Resource Management Class III Objective: 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.

Visual Resource Management Class IV Objective: The objective of this class is to provide for management activities that 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 the 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.

visual sensitivity: Visual sensitivity levels are a measure of public concern for scenic quality, and for existing or proposed visual change.

Volatile Organic Compounds (VOCs): Volatile organic chemicals that produce vapors readily, at room temperature and normal atmospheric pressure. VOCs include gasoline, industrial chemicals such as benzene, solvents such as toluene and xylene, and tetrachloroethylene (perchloroethylene, the principal dry cleaning solvent).

volatilization: The conversion of a solid or liquid into a gas or vapor.

W

water quality: The interaction between various parameters that determines the usability or non-usability of water for on-site and downstream uses. Major parameters that affect water quality include: temperature, turbidity, suspended sediment, conductivity, dissolved oxygen, pH, specific ions, discharge, and fecal coliform.

watershed: The entire land area that contributes water to a particular drainage system or stream.

Watershed Condition Indicators: An integrated suite of aquatic, riparian, and hydrologic condition measures that are intended to be used at the watershed scale.

way: Road-like feature used by vehicles having 4 or more wheels, but not declared a road by the owner and that receive no maintenance to guarantee regular and continuous use.

weed: A plant considered undesirable and that interferes with management objectives for a given area at a given point in time.

wetlands: Those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstance do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include habitats such as swamps, marshes, and bogs.

Wild and Scenic River (WSR): Rivers identified in Section 5 of the Wild and Scenic Rivers Act (WSRA) for study as potential additions to the National Wild and Scenic Rivers System (NWSRS).

Wild and Scenic River (WSR) Classifications:

- **Recreational River** -- Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.
- **Scenic River** -- A river or section of a river that is free of impoundments and whose shorelines are largely undeveloped, but accessible in places by roads.
- **Wild, Scenic, or Recreational** -- The term used for what is traditionally shortened to Wild and Scenic Rivers. Designated river segments are classified as Wild, Scenic, or Recreational, but cannot overlap (M-8351, BLM WSR Policy and Program).
- **Wild and Scenic Study River** -- Rivers identified in Section 5 of the Wild and Scenic Rivers Act of 1968 (WSRA) for study as potential additions to the National Wild and Scenic Rivers System (NWSRS). The rivers will be studied under the provisions of Section 4 of the WSRA (M-8351, BLM WSR Policy and Program).
- **Wild River** -- Those rivers or sections of rivers that are free of impoundments and that are, generally, inaccessible except by trail, with watersheds or shorelines essentially primitive and unpolluted. These represent vestiges of primitive America.

Wilderness: A congressionally designated area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, that is protected and managed to preserve its natural conditions and that (1) generally appears to have been affected mainly by the forces of nature, with human imprints substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least 5,000 acres or is large enough to make practical its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historic value. The definition contained in Section 2(c) of the Wilderness Act of 1964.

wilderness characteristics: Wilderness characteristics include size, the appearance of naturalness, outstanding opportunities for solitude or a primitive and unconfined type of recreation. They may also include ecological, geological, or other features of scientific, educational, scenic, or historical value. However Section 2(c) of the Wilderness Act of 1964 has been updated by IM-2003-195, dated June 20, 2003. Indicators of an area's naturalness include the extent of landscape modifications; the presence of native vegetation communities; and the connectivity of habitats. Outstanding opportunities for solitude or primitive and unconfined types of recreation may be experienced when the sights, sounds, and evidence of other people are rare or infrequent, in locations where visitors can be isolated, alone or secluded from others, where the use of the area is through non-motorized, non-mechanical means, and where no or minimal developed recreation facilities are encountered.

Wilderness Study Area (WSA): A designation made through the land use planning process of a roadless area found to have wilderness characteristics as described in Section 2(c) of the Wilderness Act of 1964.

wildfire: Unplanned human or naturally caused fires in wildlands.

wildland fire: Any fire, regardless of ignition source, that is burning outside of a prescribed fire and any fire burning on public lands or threatening public land resources, where no fire prescription standards have been prepared.

Wildland Fire Decision Support System (WFSS): System that assists fire managers and Analysts in making strategic and tactical decisions for fire incidents.

wildland fire use: The application of the appropriate management response to naturally-ignited wildland fires to accomplish specific resource management objectives in pre-defined designated areas outlined in Fire Management Plans. Operational management is described in the Wildland Fire Implementation Plan (WFIP).

Wildland-Urban Interface (WUI): An area where structures and other human development intermingle with undeveloped wildlands or vegetative fuels.

winter range: A range, usually at lower elevation, used by migratory deer and elk during the winter months; usually better defined and smaller than summer ranges.

withdrawal (minerals): An action that restricts the use of public lands, and that segregates the land from the operation of some, or all, of the public land and mineral laws. Withdrawals are also used to transfer jurisdiction of management of public lands to other Federal agencies.

Woodland: A forest in which the trees are often small, characteristically short-boded relative to their crown depth, and forming only an open canopy with the intervening area being occupied by lower vegetation, commonly grass.

X

xeric: Very dry region or climate; tolerating or adapted to dry conditions.

YZ