

# Abbreviations and Glossary

## Abbreviations

<b>ACEC:</b>	Area of Critical Environmental Concern
<b>AFO:</b>	Alturas Field Office
<b>AML:</b>	Appropriate management level
<b>AMP:</b>	allotment management plan
<b>AMR:</b>	Appropriate management response
<b>AUM:</b>	animal unit month
<b>ATV:</b>	all-terrain vehicle
<b>BA:</b>	biological assessment
<b>BLM:</b>	U.S. Department of the Interior, Bureau of Land Management
<b>BMP:</b>	best management practices
<b>BO:</b>	biological opinion
<b>BP:</b>	before present (in cultural resources discussion)
<b>CAA:</b>	Clean Air Act
<b>CDF:</b>	California Department of Forestry
<b>CDFG:</b>	California Department of Fish and Game
<b>CEQ:</b>	Council on Environmental Quality
<b>CFR:</b>	Code of Federal Regulations
<b>CRMA:</b>	Cultural resource management area
<b>CRMP:</b>	Cultural resource management plan
<b>DBH:</b>	diameter at breast height
<b>DFC:</b>	desired future condition
<b>DOI IB:</b>	U.S. Department of the Interior, Information Bulletin
<b>DPA:</b>	direct protection area
<b>EA:</b>	Environmental Assessment
<b>EIS:</b>	Environmental Impact Statement
<b>EO:</b>	Executive Order
<b>EPA:</b>	United States Environmental Protection Agency
<b>ERMA:</b>	extensive recreation management area
<b>ESA:</b>	Endangered Species Act
<b>ESI:</b>	ecological site inventory
<b>ES&amp;R:</b>	emergency stabilization and rehabilitation

## GLOSSARY

<b>FEIS:</b>	Final Environmental Impact Statement
<b>FGDC:</b>	Federal Geographic Data Committee
<b>FLPMA:</b>	Federal Land Policy and Management Act
<b>FPA:</b>	Fire Program Analysis
<b>GIS:</b>	geographic information system
<b>HFRA:</b>	Healthy Forest Restoration Act
<b>HMA:</b>	herd management area
<b>IMP:</b>	Interim Management Policy for Lands under Wilderness Review
<b>IRN:</b>	interim route network
<b>ISA:</b>	instant (wilderness) study area
<b>IWM:</b>	integrated weed management
<b>KGRA:</b>	known geothermal resource area
<b>LD:</b>	limited to designated routes (OHV use)
<b>LE:</b>	limited to existing routes (OHV use)
<b>LHA:</b>	land health assessment
<b>LOP:</b>	limited operating period
<b>LUP:</b>	land use plan
<b>LRU:</b>	land resource unit
<b>LTA:</b>	land tenure adjustment
<b>MFP:</b>	management framework plan
<b>Mg/L:</b>	milligrams per liter
<b>MLRA:</b>	Major Land Resource Area
<b>MOA:</b>	Memorandum of Agreement
<b>MOU:</b>	Memorandum of Understanding
<b>NAGPRA:</b>	National American Graves Protection and Repatriation Act
<b>NCA:</b>	Black Rock Desert–High Rock Canyon Emigrant Trails National Conservation Area
<b>NEPA:</b>	National Environmental Policy Act
<b>NHPA:</b>	National Historic Preservation Act
<b>NPAB:</b>	Northeast Plateau Air Basin
<b>NPS:</b>	National Park Service
<b>NRCS:</b>	Natural Resources Conservation Service
<b>NRHP:</b>	National Register of Historic Places
<b>NSO:</b>	no surface occupancy
<b>NWR:</b>	National Wildlife Refuge
<b>OHV:</b>	off-highway vehicle

## GLOSSARY

<b>PFC:</b>	properly functioning condition
<b>PM:</b>	particulate matter (PM10 = PM less than 10 microns in diameter; PM2.5 = PM less than 2.5 microns in diameter)
<b>PRIA:</b>	Public Rangelands Improvement Act
<b>PU:</b>	planning unit
<b>RAC:</b>	resource advisory council
<b>RAMS:</b>	Risk Assessment and Mitigation Strategies
<b>RFA:</b>	Riparian Functional Assessment
<b>RFD:</b>	Reasonably Foreseeable Development
<b>RHA:</b>	Rangeland Health Assessment
<b>R&amp;PP:</b>	Recreation and Public Purposes Act
<b>RMP:</b>	resource management plan
<b>RNA:</b>	research natural area
<b>ROG:</b>	reactive organic gases
<b>ROS:</b>	Recreation Opportunity Spectrum
<b>ROW:</b>	right-of-way
<b>S&amp;G:</b>	Approved Northeastern California and Northwestern Nevada Standards and Guidelines for Livestock Grazing, (July, 2000)
<b>SHPO:</b>	State Historic Preservation Officer
<b>SRA:</b>	State Responsibility Area
<b>SRMA:</b>	special recreation management area
<b>SRP:</b>	special recreation permit
<b>SSS:</b>	special status species
<b>SYU:</b>	Sustained Yield Unit
<b>TCP:</b>	traditional cultural property
<b>U.S.:</b>	United States
<b>USDA:</b>	United States Department of Agriculture
<b>USDI:</b>	United States Department of the Interior
<b>USFWS:</b>	U.S. Department of the Interior, Fish and Wildlife Service
<b>USFS:</b>	United States Forest Service
<b>USGS:</b>	United States Geological Survey
<b>VRM:</b>	visual resource management
<b>WMA:</b>	wildlife management area
<b>WFU:</b>	wildland fire use
<b>WSA:</b>	wilderness study area

## GLOSSARY

**WSR:** wild and scenic river

**WUI:** wildland-urban interface

## Glossary

**Accelerated Erosion** – Soil loss above natural levels resulting directly from human activities. Because of the slow rate of soil formation, accelerated erosion can lead to a permanent reduction in plant productivity.

**Access Easement** – An easement that allows foot, automobile, or other means of access by the public, including access to private property, and is useful for crossing private lands to access public lands.

**Activity Plan** – See IMPLEMENTATION PLAN.

**Actual Use** – The number of livestock actually grazing on a given allotment; the use made of forage by livestock or wildlife without reference to permitted or recommended use.

**Adaptive Management** – An iterative process, designed to experimentally compare selected management actions by evaluating alternative hypotheses about the ecosystem being managed.

Adaptive management consists of three parts: management actions, monitoring, and adaptation. Management actions are treated as experiments subject to modification. Monitoring is conducted to detect the effects of the management actions. Finally, management actions are refined in response to the enhanced understanding of how the ecosystem responds.

**Advisory Council on Historic Preservation (ACHP)** – An independent federal agency that serves as the chief policy advisor to the President and Congress on matters concerning historic preservation. Included on the 20 member Council are the heads of several federal agencies including the Secretary of the Interior and the Secretary of Agriculture.

**Age Class** – (1) A descriptive term to indicate the relative age of plants. (2) Refers to age and class of animals (USDA NRCS 1997); vegetation that is roughly the same age.

**Aggregate** – Any combination of sand, gravel, and crushed stone in its natural or processed state.

**Airshed** – An area that shares the same air because of topography, meteorology, and climate; an atmospheric zone potentially influenced by air pollutants from various sources.

**Aliquot Part** – A tract or other parcel of land definitely located by reference to the division of a United States Government survey township into sections (640 acres), 1/2 sections (320 acres), 1/4 sections (160 acres), half-quarter or 1/8 sections (80 acres), quarter-quarter or 1/16 sections (40 acres), 1/32 sections (20 acres), 1/64 sections (10 acres), 1/128 sections (5 acres), or 1/256 sections (2.5 acres).

**Alliance** – See VEGETATION ALLIANCE.

**Allocation** – The process of specifically assigning use between and rationing among competing users for a particular area of public land or related waters.

**Allotment (range)** – An area of land designated and managed for grazing of livestock (43 CFR Subpart 4100 Grazing Administration-Exclusive of Alaska; General §4100.0-5 Definitions).

**Allotment Management Categories** – A management approach for allotment lands using three categories based mainly on current rangeland condition: Improve (I), Maintain (M), and Custodial (C). Criteria used to assign each of these management approaches are as follows:

**Improve** – Allotments generally have the potential for increasing resource production or conditions but are not producing at that potential. There may be conflicts or controversy involving resource conditions and uses, but there are realistic opportunities to improve resource conditions.

**Maintain** – Allotments are in satisfactory resource conditions and are producing near their potential under existing management strategies. There are little or no known resource use conflicts or controversies.

**Custodial** – Allotments usually consist of relatively small acreages or parcels of public land. Often intermingled with larger amounts of nonfederal lands. There should be no known resource conflicts involving use or resource conditions. Typically, opportunities for positive economic returns from public investments are limited on these lands.

Also see RANGELAND HEALTH ASSESSMENT and ALLOTMENT MANAGEMENT PLAN.

**Allotment Management Plan (AMP)** – A documented program developed as an activity plan, consistent with the definition at 43 U.S.C. 1702(k), that focuses on, and contains the necessary instructions for, the management of livestock grazing on specified public lands to meet resource conditions, sustained yield, multiple use, economic and other objectives (43 CFR Subpart 4100 Grazing Administration-Exclusive of Alaska; General §4100.0-5 Definitions). (Synonymous with a single activity Implementation Plan)

**Allowable Cut** – The amount of timber that may be harvested from an area over a specified period of time in accord with the management objectives.

**All-Terrain Vehicle (ATV)** – A motorized off-highway vehicle, designed to travel on four or more low-pressure tires with or without tracks added, with a seat designed to be straddled by the operator and handlebars for steering.

**Alluvial fan** – A low, outspread, relatively flat to gently sloping mass of sediment, shaped like an open fan and deposited by a stream where it flows from a narrow mountain valley onto a plain or broad valley (SCS 1993).

**Alluvium** – Unconsolidated rock or sediment deposited by flowing water including gravel, sand, silt, clay, and various mixtures thereof (SCS 1993).

**Alternative** – One of at least two proposed means of meeting planning objectives.

**Analysis of the Management Situation (AMS)** – Chapter 3 in BLM’s resource management planning process. An AMS describes a planning area’s current public land management and suggests opportunities to better manage this land.

**Animal Unit** – One mature (1,000-pound) cow or the equivalent, based on an average forage consumption of 26 pounds of dry matter per day.

**Animal Unit Month (AUM)** – The amount of forage needed to sustain one cow, five sheep, or five goats for 1 month (43 CFR Subpart 4100 Grazing Administration-Exclusive of Alaska; General § 4100.0-5).

## GLOSSARY

**Annual Plant** – A plant that completes its life cycle within a single growing season (FDGC 1997). Also see PERENNIAL PLANT.

**Appropriate Management Level (AML)** – A minimum and/or maximum number of animals to be on the herd management area (HMA) on December 31 of any given year. The population objective is to ensure a thriving ecological balance among all the users and resources of the HMA such as wildlife, livestock, wild horses, vegetation, water and soil. The population objective (median number of wild horses and burros) for a herd management area (HMA) that will ensure a thriving ecological balance among all the users and resources of the HMA—for example, wildlife, livestock, wild horses, vegetation, water, and soil. This however, is expressed as a range with a minimum and a maximum number of animals that are to be on the HMA. This tells those with a special interest in these animals the lowest number of animals that will be managed for on the HMA. It also insures other resource interests the maximum number of animals to be managed for on the HMA. The objective is to manage within the AML range

**Appropriate Management Response (AMR)** – The response to a wildland fire based on an evaluation of risks to firefighters and public safety; the circumstances under which the fire occurs, including weather and fuel conditions; natural and cultural resource management objectives; protection priorities; and values to be protected. The evaluation must also include an analysis of the context of the specific fire within the overall local geographic area or national wildland fire situation.

**Aquifer** – A water-bearing bed or layer of rock, sand, or gravel that contains enough saturated permeable material to conduct groundwater and yield large amounts of water to wells or springs.

**Archaeological District** – A significant concentration, linkage, or continuity of sites important in history or prehistory.

**Archaeological Resources Protection Act of 1979 (ARPA)** – A federal law that prohibits the removal, sale, receipt and interstate transportation of archaeological resources obtained illegally (without permits), from federal or Indian lands and authorizes agency permit procedures for investigations of archaeological resources on lands under the agency's control.

**Archaeology/Archeology** – The scientific discipline responsible for recovering, analyzing, interpreting, and explaining the material culture of the historic and prehistoric past.

**Area of Critical Environmental Concern (ACEC)** – An area of BLM-administered land where special management attention is needed to do the following:

- to protect and prevent irreparable damage to important historic, cultural, or scenic values and to fish and wildlife or other natural systems or processes; or
- to protect life and provide safety from natural hazards.

**Archaeological Site** – Any place where human-made or modified artifacts, features, or ecofacts are found.

**Artifact** – A discrete or portable object manufactured or modified by human. Major artifact categories include lithic, ceramic, organic, and metal.

**Assemblage** – All the artifacts found in a component of a site.

**Association** – See VEGETATION ASSOCIATION.

## GLOSSARY

**Association** – The relationship between an artifact and other archaeological finds (other artifacts, features, faunal remains, datable sediments) within an archaeological deposit.

**At Risk** – A designation of lands that have a reversible loss in productive capability and increased vulnerability to irreversible degradation according to an evaluation of current conditions of the soil and ecological processes (National Research Council 1994). The at-risk designation may point out the need for more information to better determine the functional status of an attribute.

**Authorized Officer** – Any Bureau of Land Management employee who has been delegated the authority to perform defined duties.

**Available Forage** – Forage that can be grazed and still allow sustained forage production on rangeland. Available forage may or may not be authorized for grazing.

**Avoidance Areas** – Areas with sensitive resources where rights-of-way 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 feasible on lands outside the avoidance area. Also see EXCLUSION AREAS.

**Back Country Byway** – A road segment designated as part of the National Scenic Byway System.

**Backfire** – A fire set along the inner edge of a fireline to consume the fuel in the path of a wildfire and/or change the direction or force of the fire's convection column.

**Band (of horses)** – An organized social group of horses in the wild, based on the family unit. A band normally contains a dominant stallion, mares, and juveniles. Young stallions that have been expelled from the family units, old stallions, and stallions not strong enough to defend a group of mares often form a somewhat cohesive unit known as a 'bachelor band'. Old stallions that have lost their mares to younger stallions often stay alone until they die due to old age.

**Bare Ground (bare soil)** – All land surface not covered by vegetation, rock, or litter (NRCS 1997).

**Basal Area** – The cross-sectional area of the stem or stems of a plant or all plants in a stand. Herbaceous and small woody plants are measured at or near the ground level; larger woody plants are measured at breast height (4.5 feet above the ground) or other designated height (NRCS 1997).

**Base Flow** – The portion of stream discharge derived from such natural storage sources as groundwater, large lakes, and swamps but not derived from direct runoff or flow from stream regulation, water diversion, or other human activities.

**Base Metal** – A metal inferior in value to gold and silver, a term generally applied to the commercial metals such as copper and lead.

**Basin** – A geographic area drained by a single major stream and consisting of a drainage system of streams and often natural or artificial lakes also referred to as drainage basin, watershed, or hydrographic region.

## GLOSSARY

**Basin and Range** – A region of north-south trending mountains ranges and valleys encompassing western Utah and essentially all of Nevada. This geologic territory includes virtually all of the Great Basin and extends north to Oregon; south and east through Arizona, New Mexico, and Texas; and all the way into Mexico. The Basin and Range can be differentiated from its surrounding geologic regions by its uplifted and tilted ranges separated by broad elongated basins. The Great Basin forms a unique part of this geologic region because this hydrologic area has no drainage to the ocean.

**Best Management Practice (BMP)** – Practices based on current scientific information and technology that, when applied during the implementation of management actions, ensure that adverse impacts are minimized. BMPs are generally tailored to site-specific conditions, in order to represent the most effective and practical means to achieve management goals for a given site.

**Bioengineering** – See SOIL BIOENGINEERING.

**Biological Assessment** – The gathering and evaluation of information on proposed endangered and threatened species and critical habitat and proposed critical habitat. Required when a management action potentially conflicts with endangered or threatened species, the biological assessment is the way federal agencies enter into formal consultation with the Fish and Wildlife Service and describe a proposed action and the consequences to the species the action would affect.

**Biological Diversity (Biodiversity)** – The full range of variability within and among living organisms and the ecological complexes in which they occur. Biological diversity encompasses ecosystem or community diversity, species diversity, and genetic diversity. In this document, *biodiversity* refers to species richness defined as a number of species in a given habitat or location across habitats.

**Biological Fuels Treatments** – Methods of vegetation treatment that employ living organisms to selectively suppress, inhibit, or control herbaceous, and wood vegetation. Examples of such methods include insects; pathogens; and grazing by cattle, sheep, or goats.

**Biological Integrity** – The ability to support and maintain an integrated, adaptive community with a biological composition and functional organization comparable to a region's natural systems; the measure of a system's wholeness, including presence of all suitable elements and occurrence of all processes at suitable rates. Integrity refers to conditions under little or no human influence. A biota with high integrity reflects natural evolutionary and biogeographic processes.

**Biological Opinion** – A document that includes the following:

- the opinion of the U.S. Fish and Wildlife Service or the National Marine Fisheries Service as to whether a federal action is likely to jeopardize the existence of a species listed as threatened or endangered, or destroy or adversely modify designated critical habitat,
- a summary of the information on which the opinion is based, and
- a detailed discussion of the effects of the action on listed species or designated critical habitat.

**Biologic Crusts** – A biological community that forms a surface layer or crust on some soils. This community consists of cyanobacteria (blue-green bacteria), microfungi, mosses, lichens, and green algae. This community performs many important functions, including fixing nitrogen and carbon, maintaining soil surface stability, and preventing erosion. Biologic crusts also influence the nutrient levels of soils and the status and germination of plants in the desert. These crusts are slow to recover after severe disturbance, requiring 40 years or more to recolonize even small areas.

## GLOSSARY

**Biomass** – The total amount of living plants and animals above and/or below ground in an area at a given time (NRCS 1997); plant material that can be burned as fuel.

**Biome** – A major biotic unit consisting of plant and animal communities having similarities in form and environmental conditions.

**Biota** – The animal and plant life of a given region.

**Biotic Integrity** – The capability of a site to support characteristic functional and structural communities in the context of normal variability, to resist loss of this function and structure due to disturbance, and to recover following disturbance (National Research Council 1994).

**BLM Sensitive Species** – Species designated by a state director, usually in cooperation with the state agency responsible for managing the species and state natural heritage programs, as sensitive. They are those species that: (1) could become endangered in or extirpated from a state. Or within a significant portion of or distribution; (2) are under status review by the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service; (3) are undergoing significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution; (4) are undergoing significant current or predicted downward trends in population or density such that federal listed, proposed, candidate, or State listed status may become necessary; (5) typically have small and widely dispersed populations; (6) inhabit ecological refugia or other specialized or unique habitats; or (7) are State listed but which may be better conserved through application of BLM sensitive species status (BLM 2001a).

**Blowout** – An excavation in areas of loose soil, usually sand, produced by wind; a breakthrough or rupture of a soil surface attributable to hydraulic pressure, usually associated with sand boils.

**Board Foot** – The amount of timber equivalent to a piece of wood 12 inches square and 1 inch thick.

**Bole** – A tree trunk.

**Bone Dry Ton (BDT) (Oven Dry Ton)** – The amount of wood that would weigh 2,000 pounds at 0% moisture content.

**BP** – Before present (in cultural resources discussions).

**Browse** – The part of leaf and twig growth of shrubs, woody vines, and trees available for animal consumption; the act of consuming browse (NRCS 1997).

**Brush-Beating** – The use of one of several types of flails (special machinery pulled by a tractor) designed to shred brush to eliminate brush competition to allow understory plants to grow with more vigor.

**Buffer** – A strip of natural plant growth that helps to prevent soil erosion from along a river or stream or around a site; a strip of land where disturbances are not allowed, or are closely monitored, to preserve aesthetic and other qualities next to roads, trails, waterways, and recreation sites.

**Bulk Density** – Mass (weight) per unit volume of undisturbed soil, dried to constant weight at 105°C, Usually expressed as grams/cubic centimeter.

**Bunch Grass** – Any of various grasses in many different genera that grow in clumplike fashion rather than forming a sod or mat.

**Burned Area Emergency Stabilization and Rehabilitation (BAER)** – A post-fire process. Emergency stabilization (such as seeding to prevent erosion or the establishing of invasive plants) actions are taken within 1 year of a wildland fire for the following purposes:

- to stabilize the site,
- to prevent unacceptable degradation to natural and cultural resources, and
- to minimize threats to life or property resulting from wildland fire.

Rehabilitation (such as tree planting, invasive plant treatments, and fence replacement) actions are taken within 3 years of a wildland fire to repair or improve lands unlikely to recover from wildland fire or to repair or replace minor facilities damaged by fire.

**California Department of Fish and Game (CDFG)** – The California state agency whose mission is to manage California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. CDFG maintains native fish, wildlife, plant species and natural communities for their intrinsic and ecological value and their benefits to people. This includes habitat protection and maintenance in a sufficient amount and quality to ensure the survival of all species and natural communities. CDFG is also responsible for the diversified use of fish and wildlife, including recreational, commercial, scientific, and educational uses (CDFG website).

**California National Historic Trail** – A trail that stretched from starting points along the Missouri River to points in California and Oregon and was used by more than 200,000 gold seekers and farmers in the 1840s and '50s.

**CALVEG** – A California statewide system for describing and contrasting vegetation types (alliances) across the state and in mapping their general distributions.

**Candidate Species** – Plants and animals listed in the *Federal Register* “Notices of Review” that the U.S. Fish and Wildlife Service (USFWS) is considering for listing as threatened or endangered. Two categories are of main concern to BLM:

**Category 1** – Taxa for which the USFWS has substantial information on hand to support proposing the species for listing as threatened or endangered. Listing proposals are either being prepared or have been delayed by higher priority listing work.

**Category 2** – Taxa for which the USFWS has information to show that listing is possibly appropriate. More information is being collected.

**Canopy** – The vertical projection downward of the aerial portion of shrubs and trees, usually expressed as a percent of the ground so occupied.

**Canopy Fuels** – The live and dead foliage, live and dead branches, and lichens of trees and tall shrubs that lie above the surface fuels. Also see SURFACE FUELS.

**Carrying Capacity** – The maximum stocking rate possible without inducing permanent or long-term damage to vegetation or related resources. The rate may vary from year to year in the same area as a result of fluctuating forage production (NRCS 1997).

**Casual Use (Mineral Materials)** – Extracting mineral materials for limited personal (noncommercial) uses.

## GLOSSARY

**Casual Use (Locatable Mining)** – Mining that only negligibly disturbs federal lands and resources and does not include the use of mechanized earth moving equipment or explosives or motorized equipment in areas closed to off-highway vehicles. Casual use generally includes panning, nonmotorized sluicing, and collecting mineral specimens using hand tools.

**Casual Use (Recreation)** – Noncommercial or nonorganized group or individual activities on public land. Casual use does the following:

- complies with land use decisions and designations, i.e. special area designations,
- does not award cash prizes,
- is not publicly advertised,
- poses minimal risk for damage to public land or related water resources, and
- generally requires no monitoring.

**Catastrophic Wildfire** – Fire that burns more intensely than the natural or historical range of variability, thereby causing unacceptable erosion, fundamentally changing the ecosystem, or destroying communities of rare or threatened species or habitat.

**Categorical Exclusion** – A category of actions that do not individually or cumulatively have a significant effect on the human environment and that have been found to have no such effect in procedures adopted by a federal agency and for which, therefore, neither an environmental assessment (EA) nor an environmental impact statement (EIS) is required.

**Check Dam** – A small dam built in a gully or other small water course to decrease the streamflow velocity, minimize channel erosion, promote deposition of sediment and to divert water from a channel.

**Chemical Fuels Treatments** – The applying of chemicals to control unwanted vegetation.

**Cherry Stem** – (roads called “cherry stem”)—roads extend into a Wilderness Study Area (WSA) but are officially outside the WSA. The WSA boundary follows along the edge of the road at the edge of disturbance – up one side, around the far end and back down the other side. Because the appearance of the WSA boundary around the edge of the road resembles a cherry stem on a map, these types of roads are called “cherry stem” roads.

**Chiseling** – Breaking or loosening the soil, without inversion, with a chisel cultivator or chisel plow.

**Clean Water Action Plan (CWAP)** – A plan developed by federal agencies in response to President Clinton's request for a comprehensive plan to revitalize the Nation's commitment to protect and restore water resources.

**Climax Condition** – The culminating stage in plant succession for a given site where vegetation has reached a highly stable condition. The climax condition perpetuates itself indefinitely unless disturbed by outside forces.

**Code of Federal Regulations** – The official legal compilation of regulations directing Federal Government agencies.

## GLOSSARY

**Collaboration** – A cooperative process in which interested parties, often with widely varied interests, work together to seek solutions with broad support for managing public and other lands. Collaboration may or may not involve an agency as a cooperating agency.

**Commercial Forest Land** – Forested land that can produce new growth at a minimum rate of 20 ft<sup>3</sup>/acre/year, excluding lands withdrawn from timber production by statute or administrative regulation.

**Commercial Thinning** – The harvesting of trees that have reached economic maturity; a silviculture treatment that thins out an overstocked stand by removing trees that are large enough to be sold as products such as poles or fence posts. See THINNING and PRECOMMERCIAL THINNING.

**Communication Site** – A hilltop or favorable signal receiving and transmitting location where a collection of facilities are located. A facility consisting of a small building and tower, used for transmitting or receiving radio, television, telephone, or other electronic signals.

**Community (Plant Community)** – An assemblage of plants occurring together at any point in time, while denoting no particular ecological status. A unit of vegetation (FGDC 1997).

**Community Pit** – A designated mineral materials pit, where anyone with a BLM permit may go to acquire such materials as sand and gravel.

**Compaction Layer** – A near-surface layer of dense soil caused by the repeated impact on or disturbance of the soil surface. When soil is compacted, soil grains are rearranged to decrease the void space and bring them into closer contact with one another, thereby increasing the bulk density (Pellant and others 2000). Also see SOIL COMPACTION.

**Component (Cultural Resources)** – An association of all the artifacts from one occupation level and one time period at a site.

**Composition (Species Composition)** – The proportions of plant species in relation to the total in a given area. Composition may be expressed as cover, density, and weight (BLM 1996a).

**Condition Class** – See FIRE REGIME AND CONDITION CLASS.

**Confinement (Confine Strategy)** – The strategy employed in appropriate management responses where a fire perimeter is managed by a combination of direct and indirect actions and use of natural topographic features, fuel, and weather factors.

**Containment** – The status of a wildfire suppression action signifying that a control line has been completed around the fire, and any associated spot fires, which can reasonably be expected to stop the fires spread.

**Conformation (Horse)** – The physical appearance of an animal due to the arrangement of muscle, bone, and other body tissue. The sum of these body parts and how they blend together determine the acceptability or unacceptability of the horse's conformation. Good conformation is the overall blending of body parts to form a beautiful athlete.

**Connectivity** – The degree to which habitats for a species are continuous or interrupted across a spatial extent, where habitats defined as continuous are within a prescribed distance over which a species can successfully conduct key activities, and habitats defined as interrupted are outside the prescribed distance.

## GLOSSARY

**Conservation Easement** – A legal agreement allowing a landowner to transfer selected property rights to a land trust. The landowner retains title to the property, the easement becomes part of the land deed, and all future property owners will be bound by the terms of the easement.

**Consistency** – Under the Federal Land Policy and Management Act, the adherence of BLM resource management plans to the terms, conditions, and decisions of officially approved and adopted resource related plans, or in their absence, with policies and programs of other federal agencies, state and local governments and Indian tribes, so long as the plans also conform to the purposes, policies, and programs of federal laws and regulations that apply to BLM-administered lands (BLM 2000b).

**Contact** – Contact with Europeans (in cultural resource discussions).

**Context** – The position of an archaeological find in time and space, established by measuring and assessing its associations, matrix, and provenience.

**Conveyance** – In real property law, a transfer of legal title to land; an instrument, such as a deed, by which interest in real property is created or by which title to real property is transferred from grantor to grantee.

**Cooperating Agency** – An agency that helps the lead federal agency develop the environmental analysis for a proposed major action. U.S. Council on Environmental Quality regulations implementing the National Environmental Policy Act (NEPA) define a cooperating agency as any agency that has jurisdiction by law or special expertise for proposals covered by NEPA. Any North American Indian tribe or federal, state, or local government jurisdiction with such qualifications may become a cooperating agency by agreement with the lead agency. Cooperating agency status is generally formalized through a memorandum of understanding between BLM and the cooperating agency.

**Cooperative Management Agreement** – A document that describes agreements made between BLM and the public on adjusting grazing use. This document also defines the specific adjustments and the schedule of adjustments (usually over a 5-year period).

**Cooperative Weed Management Area** – An organization that brings together landowners and private, county, state, and federal managers within a watershed or other geographic area to combine expertise, energy, and resources to implement on the ground a comprehensive weed management program.

**Coordinated Resource Management** – An approach to reaching decisions and resolving resource conflicts that can complement any planning or management situation involving mixed land ownership or multiple resource management use. The following are elements common to this approach:

- cooperation and equitable voluntary participation of all affected interests, using a team approach;
- open communication among all participants;
- availability of technical expertise;
- strong and effective local leadership;
- agreement by consensus of the team; and
- commitment to monitoring, reviewing, and revising plans, agreements, and projects to ensure that objectives are met.

**Corridor** – See DESIGNATED CORRIDOR.

## GLOSSARY

**Cover** – Any form of environmental protection that helps an animal stay alive (mainly shelter from weather and concealment from predators). Also see SOIL COVER.

**Critical Habitat** – (1) The specific areas within the geographical area currently occupied by a species, at the time it is listed in accord with the Endangered Species Act, on which are found physical or biological features (i) essential to the conservation of the species and (ii) that may require special management considerations or protection, and (2) specific areas outside the geographical area occupied by a species at the time it is listed upon determination by the Secretary of the Interior that such areas are essential for the conservation of the species (50 CFR Part 424-Listing Endangered and Threatened Species and Designating Critical Habitat § 424.02 Definitions).

**Cross Fencing** – The building of fences across allotments to create more pastures or across pastures to create smaller, easier to manage pastures.

**Crown** – The upper portion of a tree containing the limbs, twigs, leaves, buds, flowers, and fruit.

**Crown Bulk Density** – A measure of fuel in the forest canopy used in fire behavior modeling. Crown bulk density is usually calculated by dividing the weight of needles, leaves, and smaller branches by the canopy volume.

**Crown Class** – an evaluation of an individual tree’s crown in relation to its position in the canopy and the amount of full sunlight it receives. The four recognized categories are dominant (D), co-dominant (C), intermediate (I), and overtopped or suppressed (S).

**Crown-Sprouting** – Growing shoots from a root crown (large vegetative mass just below the soil surface in some plants) after a fire or other disturbance.

**Cultural Landscape** – A geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.

**Cultural Matrix** – A cultural resource site’s composition in cultural layers. For example, the removal of vegetation from a site and the resulting erosion can mix artifacts from different layers and disturb or destroy a site’s cultural matrix and the information it may contain.

**Cultural Resource** – Any definite location of past human activity identifiable through field survey, historical documentation, or oral evidence, including archaeological or architectural sites, structures, or places; and places of traditional cultural or religious importance to specified groups, whether or not represented by physical remains.

**Cultural Resource Data** – Cultural resource information embodied in material remains and manifested in studies, notes, records, diaries, analyses, and published and unpublished manuscripts.

**Cultural Resource Integrity** – The authenticity of a property’s historic identity, evidenced by the survival of physical characteristics that existed during the property’s historic or prehistoric period.

**Cultural Resource Inventory (Survey)** – A descriptive listing and documentation, including photographs and maps of cultural resources. Also included in an inventory are the processes of locating, identifying, and recording sites, structures, buildings, objects, and districts through library and archival research, information from persons knowledgeable about cultural resources, and on-the-ground surveys of varying intensity. The three classes, or levels, of cultural resource inventories (surveys) are the following:

## GLOSSARY

**Class I** – A professionally prepared study that compiles, analyzes, and synthesizes all available data on an area’s cultural resources. Information sources for this study include published and unpublished documents, BLM inventory records, institutional site files, and state and National Register files. Class I inventories may have prehistoric, historic, and ethnological and sociological elements. These inventories are periodically updated to include new data from other studies and Class II and III inventories.

**Class II** – A professionally conducted, statistically based sample survey designed to describe the probable density, diversity, and distribution of cultural properties in a large area. This survey is achieved by projecting the results of an intensive survey carried out over limited parts of the target area. Within individual sample units, survey aims, methods, and intensities are the same as those applied in Class III inventories. To improve statistical reliability, Class II inventories may be conducted in several phases with different sample designs.

**Class III** – A professionally conducted intensive survey of an entire target area aimed at locating and recording all visible cultural properties. In a Class III survey, trained observers commonly conduct systematic inspections by walking a series of close-interval parallel transects until they have thoroughly examined an area.

**Cultural Resource Management Area (CRMA)** – A geographic area which contains concentrated numbers of prehistoric and/or historic archaeological sites that exhibit unique or important characteristics and that require management for preservation, interpretation, education, and research. This is a local field office discretionary designation, and does not imply any additional policy restrictions to land uses. See Cultural Resource Management Plan.

**Cultural Resource Management Plan (CRMP)** – A plan designed to inventory, evaluate, protect, preserve, or make beneficial use of cultural resources and the natural resources that figured significantly in cultural systems. The objectives of such plans are the conservation, preservation, and protection of cultural values and the scientific study of those values.

**Cultural Site** – A physical location of past human activities or events, more commonly referred to as an archaeological site or a historic property. Such sites vary greatly in size and range from the location of a single cultural resource object to a cluster of cultural resource structures with associated objects and features.

**Cumulative Impacts** – The effect on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. The following: Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time (40 CFR Part 1508-Terminology and Index § 1508.7 Cumulative Impact).

**Debitage** – The sharp-edged waste material left when someone creates a stone tool.

**Decadent** – Being in a state of decline or decay.

**Decision Record** – A manager’s decision on a categorical exclusion review or an environmental assessment. Comparable to the record of decision for an environmental impact statement, the decision record includes: (1) a finding of no significant impact, (2) a decision to prepare an environmental impact statement, or (3) a decision not to proceed with a proposal. Also see RECORD OF DECISION.

## GLOSSARY

**Defensible Space** – A natural or human-made area where material that can cause a fire to spread has been treated, cleared, reduced, or changed to act as a barrier between an advancing wildland fire and the loss to life, property, or resources. In practice, "defensible space" is defined as an area of at least 30 feet around a structure that is cleared of flammable brush or vegetation.

**Deferred Grazing** – Postponing grazing or resting an area for a prescribed period, usually to meet a specific management objective (NRCS 1997). Also see REST.

**Deferred-Rotation Grazing** – Any grazing system that provides for a systematic rotation of the deferment among pastures. The time of the rest period generally changes in succeeding years (NRCS 1997).

**Deposition Area** – An area offsite from where the original soil erosion occurred that now has the soil deposits from the original soil erosion area.

**Desert Land Entry** – An application to acquire title to irrigable arid agricultural public lands for the purpose of reclamation, irrigation, and cultivation in part.

**Designated Corridor** – BLM's preferred route for placing rights-of-way for utilities (pipelines and power lines) and modes of transportation (highways and railroads).

**Desired Future Condition** – The future condition of land resources on a landscape scale that meet management objectives. Desired future condition is based on ecological (such as desired plant community), social, and economic considerations during the land and resource planning process. Desired future condition is usually expressed as a ecological status of vegetation (species composition, habitat diversity, age, and size classes of species) and desired soil qualities (conditions of soil cover, erosion, compaction, loss of soil productivity).

**Desired Plant Community** – One of several plant community types that may occupy an ecological site, the one or combination that meets the minimum quality criteria for the soil, water, air, plant, and animal resources, and that meets the landowner's or manager's objective (NRCS 1997); the plant community that has been determined through a land use or management plan to best meet the plan's objective for the site (BLM 1998a).

**Diameter at Breast Height (dbh)** – The diameter of a tree 4.5 feet above the ground on the uphill side of the tree.

**Directional Drilling** – The technique of drilling at an angle from the vertical by deflecting the drill bit.

**Direct Protection Area (DPA)** – A concept developed by federal and state fire protection agencies to help resolve the management and fiscal complexities of wildland fires burning across intermingled and adjacent areas of state and federal responsibility. Within DPAs, federal and state agencies assume fire protection responsibility for the lands of another agency, along with their own. The agencies also, as nearly as possible, represent the other agencies' interests and objectives. Each agency must, therefore recognize, know, and understand each other's mission objectives, policies, and authorities.

**State Responsibility Areas (SRAs)** – Land in California for which the state is responsible for wildlife fire protection under California Public Resource Code Sections 4125 to 4127. These lands are often referred to as state and private lands.

## GLOSSARY

**Federal Responsibility Areas (FRAs)** – Land in national forests for which the U.S. Forest Service is responsible, national park land for which the National Park Service is responsible, and public land for which BLM is responsible for wildland fire protection.

**Discharge** – The rate of flow or volume of water flowing in a stream at a given place or within a given period of time.

**Dispersed Recreation** – Recreation activities that do not require developed sites or facilities.

**Disposal Areas** – Broad areas of public lands where BLM generally intends to dispose of existing public lands, either by land exchange or sale.

**Dissolved Oxygen (DO)** – The amount of free (not chemically combined) oxygen dissolved in water, wastewater, or other liquid, usually expressed in milligrams per liter, parts per million, or percent of saturation. Adequate concentrations of dissolved oxygen are needed for the life of fish and other aquatic organisms and the prevention of offensive odors. Dissolved oxygen levels are considered the most important and commonly employed measure of water quality and indicator of a water body's ability to support desirable aquatic life.

**Disturbance Regime** – The historic patterns (frequency and extent) of fire, insects, wind, landslides, and other natural processes in an area.

**Dominant Species** – Plants that, in abundance, coverage, or size, exert a major controlling influence on the conditions of existence for associated species in the ecosystem. Also see SUBDOMINANT SPECIES.

**Drift Fences** – Fences built to prevent livestock from wandering from their allotted range.

**Duff** – The layer of decomposing organic materials lying below the litter layer of freshly fallen twigs, needles, and leaves and immediately above the mineral soil.

**Easement** – The right to use land in a certain way granted by a landowner to a second party.

**Ecofact** – Bones, vegetal matter, pollen, shells, modified soils, or other archaeological finds that though not human manufactured, give important clues as to human behavior or the environmental context of such behavior.

**Ecological Health** – The degree to which the integrity of the soil and ecological processes of ecosystems are sustained (adapted from National Research Council 1994).

**Ecological Potential** – The capability of an ecological site to function within a normal range of variation in ecological processes in a state, or after having crossed a threshold. The same capability can also apply to a vegetation alliance and association but most normally applies to an ecological site. Also see STATE and THRESHOLD.

**Ecological Processes** – Processes that include the water cycle (the capture, storage, and redistribution of precipitation) energy flow (conversion of sunlight to plant and animal matter) and the nutrient cycle (the cycle of nutrients, such as nitrogen and phosphorus through the physical and biotic components of the environment). Ecological processes functioning within a normal range of variation at an ecological site will support specific plant and animal communities (Herrick and others 2005).

## GLOSSARY

**Ecological Site (Range Site)** – A distinctive kind of land that has specific physical characteristics and that differs from other kinds of land in its ability to produce a distinctive kind and amount of vegetation.

**Ecological Site Inventory** – A resource inventory that involves the use of soils information to map ecological sites and plant communities and the collection of natural resource and vegetation attributes. The sampling data from each of these soil-vegetation units, referred to as site write-up areas (SWAs), become the baseline data for natural resource management and planning.

**Ecological Succession** – An ecosystem’s gradual evolution to a stable state. If, through the ability of its populations and elements, an ecosystem can absorb changes, it tends to persist and become stable through time.

**Ecosystem** – A dynamic complex of plant, animal, fungal, and microorganism communities and their associated nonliving environment interacting as an ecological unit (Noss and Cooperrider 1994).

**Ecosystem Diversity** – The variety of species and ecological processes that occur in different physical settings.

**Ecosystem Management** – Any land-management system that seeks to protect viable populations of all native species, perpetuate natural-disturbance regimes on the regional scale, adopt a planning timeline of centuries, and allow human use at levels that do not result in long-term ecological degradation (Noss and Cooperrider 1994).

**Ecotourism** – Tourism that essentially focuses on natural rather than developed attractions with the goal of enhancing the visitor’s understanding and appreciation of nature and natural features. Such tourism often attempts to be environmentally sound and to contribute economically to the local community.

**Effects** – Effects and impacts in the regulations are synonymous. Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions that may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.

Effects include

- Direct effects, which are caused by the action and occur at the same time and place and
- Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are 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 are related effects on air and water and other natural systems, including ecosystems (40 CFR Part 1508-Terminology and Index).

**Electrofishing** – A fish sampling technique using electric currents and electric fields to control fish movement and/or immobilize fish, allowing capture.

**Eligible River** – A river or river segment found—through interdisciplinary team and, in some cases, interagency review—to meet Wild and Scenic River Act criteria of being free-flowing and having one or more outstandingly remarkable values.

## GLOSSARY

**Endangered Species** – Any species defined through the Endangered Species Act as being in danger of extinction throughout all or a significant portion of its range and published in the *Federal Register* (50 CFR Part 424-Listing Endangered and Threatened Species and Designating Critical Habitat § 424.02 Definitions). Also see THREATENED SPECIES.

**Entry** – An application to acquire title to public lands.

**Environmental Assessment (EA)** – A concise public document for which a federal agency is responsible. An EA serves (1) to briefly provide enough evidence and analysis for determining whether to prepare an environmental impact statement (EIS) or a finding of no significant impact (FONSI), and to aid an agency's compliance with the National Environmental Policy Act (NEPA) when no EIS is needed; and (2) to facilitate preparing an EIS when one is needed. Also see ENVIRONMENTAL IMPACT STATEMENT and FINDING OF NO SIGNIFICANT IMPACT (FONSI).

**Environmental Impact** – The positive or negative effect of any action upon a given area or resource.

**Environmental Impact Statement (EIS)** – A detailed written statement as required by section 102(2)(C) of the National Environmental Policy Act (40 CFR Part 1508-Terminology and Index).

**Environmental Justice (EJ)** – The fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income in developing, implementing, and enforcing environmental laws, regulations, and policies.

**Ephemeral Stream** – A stream that flows only in direct response to precipitation, and whose channel is at all times above the water table (BLM 1993).

**Erosion** – The wearing away of the land surface by running water, waves, or moving ice and wind, or by such processes as mass wasting and corrosion (solution and other chemical processes). The term “geologic erosion” refers to natural erosion processes occurring over long (geologic) time spans. “Accelerated erosion” generally refers to erosion in excess of what is presumed or estimated to be naturally occurring levels, and which is a direct result of human activities (SCS 1993).

**Ethnographic** – See ETHNOLOGY.

**Ethnology** – The branch of cultural anthropology that deals with the scientific investigation of living cultures. Ethnology's main data collection technique is participant observation—living with the people being investigated with the intention of full immersion in their culture. Such research is called ethnography.

**Eutrophication** – The process of enrichment of water bodies by nutrients. Eutrophication of a lake normally contributes to its slow evolution into a bog or marsh and ultimately to dry land. Eutrophication may be accelerated by human activities.

**Even Aged Management** – Timber management that creates stands of trees that are essentially the same age.

**Excess Animals** – Wild, free-roaming horses or burros that (1) have been removed from an area by the Secretary of the Interior pursuant to application of law, or (2) must be removed from an area to preserve and maintain a thriving natural ecological balance and multiple use relationship in that area.

## GLOSSARY

**Exclosures** – Areas of land enclosed by a fence for the purpose of excluding all animals or specified species or groups of animals. Exclosures serve as control areas where biotic factors can be measured, recorded, and evaluated. These can be compared with plots in adjacent areas to which the excluded animals do have access (BLM 1989b).

**Exclusion Areas** – Areas with sensitive resources where rights-of-way, Section 302 permits, leases, and easements would not be authorized. Also see AVOIDANCE AREAS.

**Executive Order 11644 as Amended by Executive Order 11989** – Executive orders (signed respectively by President Nixon in 1972 and President Carter in 1977) issued to control the use of off-highway vehicles on public lands, protect resources, promote the safety of public land users, and minimize conflicts among uses. The order requires federal agencies to monitor the effects of OHV use and to close areas or trails to OHVs if it is determined that their use will damage the soil, vegetation, wildlife, wildlife habitat, or cultural or historic resources.

**Existing Ways** – Routes inventoried in the 1979 BLM roadless area inventory.

**Exotic** – All species of plants and animals not naturally occurring, either presently or historically, in any ecosystem of the United States (EO 11987 1977).

**Extensive Recreation Management Area (ERMA)** – A resource management plan (RMP) allocation for recreation use made for all BLM land covered by the plan but not otherwise allocated in special recreation management areas.

In ERMAs:

- visitors would engage in dispersed recreation uses;
- management would emphasize self-sufficient exploration and discovery; and
- recreation facilities would be developed only as needed to mitigate the impacts of visitor use, protect resources, and provide visitor information and interpretation needed to meet BLM management goals established in the RMP for land health and customer service. Also see SPECIAL RECREATION MANAGEMENT AREAS.

**Extirpated Species** – A locally extinct species; a species that is no longer found in a locality, but exists elsewhere (adapted from Noss and Cooperrider 1994).

**Facultative** – Capable of existing under different conditions or using different modes for nutrition. For example, facultative wetland plants can occur in either wetlands or uplands although they may be more abundant in the wetlands.

**Fault Block** – A rock mass bounded by faults on at least two sides.

**Feature** – A nonportable artifact, such as a house, structure, or storage pit, that cannot be removed from a site. Associated with cultural resources.

**Fecal Coliform Bacteria** – A group of bacteria that are passed through the fecal excrement of humans, livestock, and wildlife. These organisms can enter rivers through runoff. Although these bacteria do not directly cause disease, high amounts of fecal coliform bacteria suggest the presence of disease-causing agents. Possible diseases caused by this type of water contamination include dysentery, typhoid fever, hepatitis, and gastroenteritis.

## GLOSSARY

**Federal Candidate Species** – Species not protected under the Endangered Species Act, but being considered by the U.S. Fish and Wildlife Service for inclusion on the list of federally threatened or endangered species.

**Federal Land Policy And Management Act (FLPMA)** – Public Law 94-579, the act that (1) established, for the BLM, standards for managing the public lands including land use planning, sales, withdrawals, acquisitions, and exchanges; (2) authorized the setting up of local advisory councils representing major citizens groups interested in land use planning and management, (3) established criteria for reviewing proposed wilderness areas, and (4) provided guidelines for other aspects of public land management such as grazing.

**Federal Proposed Species** – Any species of fish, wildlife, or plant that is proposed in the *Federal Register* to be listed under Section 4 of the Endangered Species Act.

**Federal Register** – The Federal Government’s official daily publication for rules, proposed rules, and notices of federal agencies and organizations, as well as executive orders and other presidential documents.

**Fee Interest (Fee Simple or Fee Simple Interest)** – Full ownership of a piece of land, including all legal rights of the property. Also see LESS-THAN-FEE INTEREST.

**Fibre Saturation Point (fsp)** – The moisture content of wood at which all free water is lost from cell cavities and only water bound within the cell walls remains; generally between 25 and 30% moisture content; shrinkage occurs only as wood moisture content drops below fsp.

**Fifth-Level Watershed** – See STREAM ORDER.

**Finding of No Significant Impact (FONSI)** – A document prepared by a federal agency, usually accompanying an environmental assessment, that briefly explains why a given action will not have a significant effect on the human environment and why an environmental impact statement (EIS) will therefore not be required. Also see ENVIRONMENTAL ASSESSMENT.

**Fireline (Control Line)** – An inclusive term for all constructed or natural barriers, and treated fire edges used to control a fire. Also called a fire trail.

**Fire Management Plan** – A strategic plan that defines a program to manage wildland and prescribed fires and documents the fire management program in the approved land use plan. The fire management plan is supplemented by operational procedures such as preparedness plans, preplanned dispatch plans, prescribed fire plans, and prevention plans.

**Fire Management Unit** – A fire planning unit in which preparedness strategies are designed to meet watershed or resource management objectives, designated by logical fire control or containment criteria such as watershed basins, sub-basins, ridgetops, topographic features, roads, or vegetation changes.

**Fire Return Interval (Fire Frequency)** – How often fire burns a given area, expressed as the interval or average time between fires (e.g. fire returns to an area every 5 to 7 years).

## GLOSSARY

**Fire Regime** – A combination of components that characterize fire in a potential natural vegetation group, including frequency, intensity, seasonality, and extent. Historical fire regimes may differ from current fire regimes, measured by Fire Regime Condition Class. There are five fire regime groups:

Group 1	0 – 35 year frequency	Low Severity
Group 2	0 – 35 year frequency	Stand Replacement
Group 3	35 – 100+ year frequency	Mixed Severity
Group 4	35 – 100+ year frequency	Stand Replacement
Group 5	200+ year frequency	Stand Replacement

**Fire Regime Condition Class (FRCC)** – A qualitative measure describing the degree of departure from reference (historical) fire regimes. Severe departures may result 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 departures: fire suppression, timber harvesting, livestock grazing, introduction and establishment of exotic plant species, introduced insects or diseases, or other management activities. The three condition classes for a fire regime are the following:

**Condition Class 1:** Fire regimes in this condition class are mostly within historical ranges. Vegetation composition and structure are intact. The risk of losing key components of the ecosystem from fire is low.

**Condition Class 2:** Fire regimes in this condition class have been moderately altered from their historic range, either by increasing or decreasing the fire frequency. The risk of losing key components of the ecosystem from fire is moderate.

**Condition Class 3:** Fire regimes in this condition class have been significantly altered from their historical return intervals. Vegetation composition, structure, and diversity have been substantially modified. The risk of losing key components of the ecosystem from fire is high.

**Fire Retardant** – Any substance except plain water that by chemical or physical action reduces flammability of fuels or slows their rate of combustion.

**Fire Suppression** – Suppression of wildfires under full suppression or appropriate management response criteria. Also see APPROPRIATE MANAGEMENT RESPONSE.

**Fishery** – Habitat that supports the propagation and maintenance of fish.

**Flag-and-Avoid Approach** – An approach to or tactic in cultural resource management under which a cultural resource site is marked with flagging and then avoided.

**Flat Rock** – Volcanic decorative rock occurring in relatively thin (often less than an inch) layers in northeast California and used for construction, landscaping, and Native American ceremonies.

**Forage** – All browse and herbage that is available and acceptable to grazing animals or that may be harvested for feed; the act of consuming forage (NRCS 1997).

**Forb** – Any broad-leafed herbaceous plant that is not a grass, sedge, or rush (NRCS 1997).

**Forestlands** – Land on which the historic climax plant community is dominated by trees (NRCS 1997).

**Fourth-Level Watershed** – A sub-basin category in the hydrologic unit hierarchy. The average size of a sub-basin is about 450,000 acres. Also see STREAM ORDER.

## GLOSSARY

**Free Use Permit** – A permit that allows the removal of timber or other resources from the public lands free of charge.

**Fuel Break** – A wide strip or block of land on which the native vegetation has been permanently modified so that fires burning into it can be easier to extinguish. In area where cheatgrass is widespread, landowners or managers may install fuel breaks of some other, less fire-prone vegetation to reduce fire spread.

**Fuel Load (in fire ecology)** – The oven-dry weight of fuel per unit area, usually expressed in tons/acre.

**Fuel Loading** – The amount of fuel present expressed by weight of fuel per unit area.

**Fuel Model** – A standardized description of fuels available to a fire based on the amount, distribution, and continuity of vegetation and wood. This information is used for rating fire danger and predicting fire behavior.

**Fuel Moisture Content (Fuel Moisture) (in fire ecology)** – The water content of a fuel expressed as a percentage of the fuel's oven dry weight. For dead fuels, which have no living tissue, moisture content is determined almost entirely by relative humidity, precipitation, dry-bulb temperature, and solar radiation. The moisture content of live fuels is physiologically controlled within the living plant.

**Fuelwood** – Trees used for the production of firewood logs or other wood fuel.

**Full Suppression** – An appropriate management response to wildfire (or an escaped wildland fire use or prescribed fire) that results in curtailment of fire spread and eliminates all identified threats from the particular fire.

**Functional Plant Community** – A suite or group of species that—because of similar shoot or root structure, photosynthetic pathways, nitrogen-fixing ability, or life cycle—are grouped together on an ecological basis.

**Functional/Structural Groups** – A suite of species that because of similar shoot (height and volume) or root (fibrous versus tap) structure, photosynthetic pathways, nitrogen fixing ability, or life cycle are grouped together on an ecological site basis (Pellant and others 2000)

**Functioning** – Refers to health attributes where most of the associated indicators are functioning properly relative to the ecological site description or ecological reference area, given the normal range of variability associated with the site and climate (Pellant and others 2000).

**Fundamentals of Rangeland Health** – As described in 43 CFR 4180, the conditions in which rangelands are in properly functioning physical condition, ecological processes are supporting healthy biotic populations and communities, water quality is meeting state standards and BLM objectives, and special status species habitat is being restored or maintained.

**Gather** – The operation in which wild horses are herded to collection points and excess animals are removed either to the adoption system or to holding facilities outside the area.

**Geophysical Survey** – A scientific method of prospecting that measures the physical properties of rock formations. Common properties investigated include magnetism, specific gravity, electrical conductivity, and radioactivity.

## GLOSSARY

**Geographic Information System (GIS)** – A computer application used to store, view, and analyze geographical information, especially maps.

**Geomorphology** – The science dealing with the form and surface configuration of the solid earth. Geomorphology is mainly an attempt to reveal the complex interrelationships between the origin of surface features and the causes of the surface alteration.

**Geothermal Energy** – Energy produced by tapping the earth’s internal heat from hydrothermal convection systems, where water or steam transfers the heat from the deeper part of the earth to the areas where the energy can be tapped.

**Global Positioning System (GPS)** – A system for providing precise locations for points on the Earth’s surface, which is based on data transmitted by satellites.

**Goal** – A broad statement of a desired outcome. Goals are usually not quantifiable and may not have established timeframes for achievement. Also see OBJECTIVE.

**Grandfathered** – The status accorded certain properties, uses, and activities that legally existed before the adoption of a law, regulation, or restriction and therefore are not required to adhere to the law, regulation, or restriction. See, for example, VALID EXISTING RIGHTS.

**Gravitational Creep** – The slow mass movement of soil and soil material down relatively steep slopes, mainly under the influence of gravity but facilitated by saturation with water and alternating freezing and thawing.

**Grazing Allotment** – See ALLOTMENT.

**Grazing Capacity** – See CARRYING CAPACITY.

**Grazing Cycle** – The amount of time required for livestock to rotate completely through all the pastures in an allotment management plan.

**Grazing Permit/License/Lease** – A contractual agreement between BLM and another party that permits grazing of a specific number, kind, and class of livestock for a specified period on a defined rangeland. The permit allows fee-based use of public land, subject to permit stipulations and annual adjustment based on current rangeland condition.

**Grazing Privileges** – The use of public land for livestock grazing under permits or leases.

**Grazing Rest** – See REST.

**Grazing Season** – An established period for which grazing permits are issued.

**Grazing System** – A specialization of grazing management that defines systematically recurring periods of grazing and deferment for two or more pastures or management units. Examples of grazing systems include rest-rotation grazing, deferred grazing, deferred rotation grazing (BLM 1989a).

**Great Basin** – The Great Basin Desert, the largest U. S. desert, covers an arid expanse of about 190,000 square miles and is bordered by the Sierra Nevada Range on the west and the Rocky Mountains on the east, the Columbia Plateau to the north and the Mojave and Sonoran deserts to the south.

## GLOSSARY

This is a cool or "cold desert" due to its more northern latitude, as well as higher elevations (at least 3,000 feet, but more commonly from 4,000 to 6,500 feet). Precipitation, generally 7-12 inches annually, is more evenly distributed throughout the year than in the other three North American deserts. Winter precipitation often falls as snow.

Playas are a conspicuous part of this desert, due to its recent geological activity. In notable contrast to the other three deserts, Great Basin vegetation is low and homogeneous, often with a single dominant species of bush for miles. Typical shrubs are Big Sagebrush, Blackbrush, Shadscale, Mormon-tea and greasewood. There are only occasional yuccas and very few cacti.

**Green Stripping** – A common term for a vegetation fuel break system that consists of planned corridors of vegetation to break up large blocks of highly flammable species such as cheatgrass, to improve fire suppression effectiveness. These breaks are planned to be compatible with, and take advantage of, resource development such as seedings and natural barriers (BLM 1985).

**Green Timber** – Freshly felled or undried timber with its moisture content above the fibre saturation point.

**Ground Cover** – See SOIL COVER.

**Ground Fuel** – All combustible materials below the surface litter that normally support a glowing combustion without flame, including duff, tree or shrub roots, punchy wood, peat, and sawdust.

**Groundwater** – Subsurface water that is in the zone of saturation. The top surface of the ground water is the water table. Groundwater is the source of water for wells, seepage, and springs (NRCS 1997).

**Growing Stock** – Live sawtimber trees and smaller trees capable of growing into sawtimber trees that meet certain standards of quality.

**Guidelines** – Practices, methods, or techniques determined to be appropriate to ensure that standards can be met or that significant progress can be made toward meeting standards. Guidelines are tools such as grazing systems, vegetation treatments, or improvement projects that help managers and permittees achieve standards. Guidelines may be adapted or modified when monitoring or other information finds that they are not effective, or a better means of achieving the applicable standard becomes appropriate (USDI 4180). Guidelines for grazing were developed by the Northeast California Resource Advisory Council (RAC) in cooperation with the California State Director. These were given National Environmental Policy Act analysis in the *Rangeland Health Standards and Guidelines for California and Northwestern Nevada Final Environmental Impact Statement* (Appendix B).

Off-highway vehicle (OHV) guidelines developed by the Northeast RAC are a part of this RMP and EIS. Guidelines can only be changed through cooperation between the State Director and the Northeast California RAC and with the approval of the Secretary of the Interior (43 CFR §4180.2).

**Guidelines for Livestock Grazing** – Livestock grazing management grazing tools, methods, strategies, and techniques designed to maintain or achieve healthy public lands; as defined by the Standards for Rangeland Health (Appendix B). Guidelines for Livestock Grazing within Northeastern California and Northwestern Nevada were developed by the State Director in consultation with the Northeast California Resource Advisory Council (RAC) as directed in 43 CFR Subpart 4180-Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration § 4180.2 Standards and guidelines for grazing administration. The Eagle Lake Field Office RMP will establish Guidelines for OHV Use which were also developed by the State Director in consultation with the Northeast California RAC.

## GLOSSARY

**Guild** – A group of species having similar ecological resource requirements or foraging strategies.

**Gully** – A very small channel with steep sides cut by running water ordinarily runs only after rain or ice or snow melt. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to wheeled vehicles and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage (SCS 1993).

**Guzzler** – A device for collecting and storing precipitation for use by wildlife or livestock. A guzzler consists of an impenetrable water collecting area, a storage facility, and a trough from which animals can drink (NRCS 1997).

**Habitat** – A specific set of physical conditions that surround a species, group of species, or a large community. Wildlife management considers the major constituents of habitat to be food, water, cover, and living space.

**Habitat Connectivity** – The degree to which similar habitats are linked.

**Habitat Diversity** – The number of different types of habitat within a given area.

**Habitat Maintenance** – The care and preserving of the biological resources of conserved habitat, which occur naturally or are created through habitat enhancement techniques.

**Habitat Management Plan** – A written and approved activity plan for a geographic area of public lands that identifies wildlife habitat management actions to be implemented in achieving specific objectives related to resource management plan/management framework plan planning document decisions (a single-activity form of an implementation plan).

**Healthy Forests Initiative** – An initiative launched in August 2002 by President Bush to reduce the risks that severe wildfires pose to people, communities, and the environment. The initiative proposes that protecting forests, woodlands, shrublands, and grasslands from unnaturally intensive and destructive fires helps improve the condition of public lands, increases firefighter safety, and conserves landscape attributes valued by society.

**Hedging** – The appearance of browse plants that have been browsed so as to appear artificially clipped. The consistent browsing of terminal buds of browse species causes excessive lateral branching and a reduction in upward growth.

**Herbaceous** – Of, relating to, or having the characteristics of a vascular plant that does not develop woody tissue; nonwoody vegetation such as grasses and forbs.

**Herbivory** – The eating of plants by animals.

**Herd** – One or more stallions and his mares and associated bachelor bands.

**Herd Area** – A geographic area occupied by a wild horse or burro and its habitat in 1971.

**Herdling** – The controlled movement of livestock.

**Herd Management Areas (HMAs)** – A geographic area of a suitable size and location to provide adequate range for a herd, or herds, occupying the area.

**Hibernaculum** – The place where an organism spends the winter.

**High Site** – In forestry, a site that has a higher site index (will grow a tree faster) than a low site. Being a high or low site is a quality that is relative to another site, for example relative from juniper to juniper, pine to mixed conifer, or any site to another. A high juniper site might have a site index of 30, whereas a low juniper site might have a site index of 15. But the high juniper site is a low site when compared to a Douglas-fir low site, which has a site index of 60. See SITE INDEX.

**Historic District** – An area that generally includes within its boundaries a significant concentration of properties linked by architectural style, historical development, or a past event.

**Historic Integrity** – See CULTURAL RESOURCE INTEGRITY.

**Home Range** – The area in which an animal travels in the scope of natural activities; the established territory of a wild animal such as wild horses. An HMA may include home ranges for a number of different bands of horses or home ranges may overlap.

**Hydrologic Function (Stability)** – The capacity of a site to capture, store, and safely release water from rainfall, run-on, and snowmelt; to resist a reduction in this capacity; and to recover this capacity following degradation. Hydrologic function is one of the three attributes of rangeland health.

**Impacts** – See EFFECTS.

**Implementation Plan** – A site-specific plan written to implement decisions made in a land use plan. An implementation plan usually selects and applies best management practices to meet land use plan objectives. Implementation plans are synonymous with “activity” plans. Examples of implementation plans include interdisciplinary management plans, habitat management plans, and allotment management plans.

**Incised Channel** – A channel that has been cut through the bed of the valley floor and formed by the process of degradation, as opposed to one flowing on a floodplain.

**Indian Trust Resource** – Any resource in collective tribal holding or individual ownership for which the Secretary of the Interior has a continuing trust responsibility to manage in a manner to benefit the respective tribe or individual. The most common example is extractive resources on a reservation. Some trust lands were set aside as compensation for claims made against the Government, most of which are off-reservation.

(Adapted from: Forest Service National Resource Guide to American Indian and Alaska Native Relations at <http://www.fs.fed.us/people/tribal/>) Also see TRUST ALLOTMENT and TRUST RESPONSIBILITY.

**Infiltration** – The downward entry of water into the soil or other material.

**Infrastructure** – The set of systems and facilities that support a region or community’s social and economic structures. Examples of such systems include energy, transportation, communication, education, medical service, and fire and police protection.

**Ingrowth** – The process whereby previously open forest becomes more dense and treed grassland become more densely covered with young trees.

## GLOSSARY

**Inholdings** – Parcels of land owned or managed by someone other than BLM, but surrounded in part or entirely by BLM-administered land.

**Initial Attack** – The actions taken by the first resources to arrive at a wildfire to protect lives and property, and prevent further extension of the fire.

**Instant Study Areas (ISAs)** – Lands that were previously classified as natural or primitive areas and were determined to be ISAs under Section 603 of the Federal Land Policy and Management Act.

**Instream Water Right** – The right to maintain water in-stream for public use. An instream water right does not require a diversion or any other means of physical control over the water.

**Instream Water Use** – Typically nonconsumptive uses of water that do not require diversion from its natural watercourse (e.g. fish and other aquatic life, recreation, navigation, esthetics, and scenic enjoyment). Hydroelectric power production is also considered nonconsumptive but may require temporary diversion from the natural streamflow.

**Integrated Weed Management Program (IWMP)** – A noxious and invasive plants program that emphasizes prevention and education and implements cultural, physical, biological, and chemical treatments to reduce or eliminate weeds.

**Interim Management Policy for Lands under Wilderness Review (IMP) (BLM 1995)** – BLM’s strategy for managing wilderness study areas following their recommendation for designation but before Congress designates them as wilderness or releases them to multiple use management.

**Intensive Grazing Management** – Grazing management that uses livestock as a tool to meet some objective by using rest or rotational grazing practices. Objectives could be to restore plant composition, increase forage production, or increase animal production. It generally will be done with additional investment in labor, capital and other resources.

**Inter-Basin Water Transfer** – The import or export of water from one basin to another. Also see BASIN.

**Interim Management Policy for Lands under Wilderness Review (IMP)** – A document (BLM 1995) that lays out the requirements for managing BLM wilderness study areas so as “not to impair their suitability as wilderness.”

**Intermittent Stream** – A stream or reach of a stream that does not flow year round and that flows only when it receives baseflow solely during wet periods or it receives groundwater discharge or protracted contributions from melting snow or other erratic surface and shallow subsurface sources (SCS 1993). See EPHEMERAL STREAM.

**Interpretation** – Conveying information about the origin, meaning, or values of natural or cultural heritage through live, interactive, or static media. Interpretation occurs near the subject and is designed to stimulate visitor interest, increase understanding, and promote support for conservation.

**Invasive Species** – An alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health (Executive Order 13112 1999).

**Keystone Species** – A species, such as the beaver, that affects the survival and abundance of many other species in its community.

**Known Geothermal Resource Area (KGRA)** – An area where geothermal resources are known to exist.

**Ladder Fuels** – Fuels like shrubs and branches that carry the fire from the ground to the tops of trees.

**Land Use Authorization** – BLM’s authorizing through leases, permits, and easements of uses of the public land. Land use authorizations may allow occupancy, recreational residences and cabin sites, farming, manufacturing, outdoor recreation concessions, National Guard maneuvers, and many other uses.

**Leasable Minerals** – Minerals whose extraction from federally managed land requires a lease and the payment of royalties. Leasable minerals include coal, oil and gas, oil shale and tar sands, potash, phosphate, sodium, and geothermal steam.

**Land Capability Classification** – The U.S. Department of Agriculture, Natural Resources Conservation Service’s eight classes of land capability according to the risk of land damage or the difficulty of land use. These classes range from *Class I*—Soils with few limitations restricting their use to *Class VIII*—Soils and landforms that preclude their use for commercial plant production and restrict their use to recreation, wildlife, water supply, or aesthetic purposes.

**Land Health** – The degree to which the integrity of the soil and ecological processes of ecosystems are maintained (National Research Council 1994). The degree to which the integrity of the soil, vegetation, water, and air, as well as the ecological processes of ecosystems, are balanced and sustained (Task Group on Unity in Concepts and Terminology 1995).

**Land Health Assessment** – The estimation or judgment of the status of ecosystem structures, functions, or processes, within a specified geographic area (preferably a watershed or a group of contiguous watersheds) at a specific time. An assessment is conducted by gathering, synthesizing, and interpreting information, from observations or data from inventories and monitoring. An assessment characterizes the status of resource conditions so that the status can be evaluated (see definition of evaluation) relative to land health standards. An assessment sets the stage for an evaluation. An assessment is not a decision (BLM 2001b).

**Land Health Standards** – Expressions of levels of physical and biological condition or degree of function required for healthy lands and sustainable uses and for defining minimum resource conditions that must be achieved and maintained (BLM 2001b). Standards for rangeland health for northeast California and northwest Nevada were developed by the Northeast California Resource Advisory Council (RAC) in cooperation with the BLM California State Director. These standards were given National Environmental Policy Act (NEPA) analysis in the *Rangeland Health Standards and Guidelines for California and Northwestern Nevada Environmental Impact Statement* (BLM 1998a). The record of decision (BLM 1999b) was signed by the State Director in June 1999 and was approved by the Secretary of the Interior on July 13, 2001. At the same time the record of decision was signed by the BLM California State Director, Instruction Memorandum CA-99-09, dated June 1, 1999, was issued, stating that the rangeland standards applied to all lands managed by the Bureau of Land Management, California, hence Land Health Standards. Land Health Standards can be changed only through cooperation between the California State Director and the Northeast California RAC with the approval of the Secretary of the Interior (43 CFR §4180.2).

**Land Resource Units (LRUs)** – Geographic areas, usually of several thousand acres, that have a particular pattern of soils, climate, water resources, and land uses.

## GLOSSARY

**Landscape** – A heterogeneous land area with interacting ecosystems that are repeated in similar form throughout. Landscapes vary in size, down to a few kilometers (miles) in diameter (Forman and Godron 1986).

**Landscape Element** – The basic, relatively homogeneous, ecological unit, whether of natural or human origin, on land at the scale of a landscape (Forman and Godron 1986).

**Landscape Features** – The land and water form, vegetation, and structures that compose the characteristic landscape.

**Landscape Structure** – The distribution of energy, materials, and species in relation to the size, shapes, numbers, kinds, and configuration of landscape elements or ecosystem (Forman and Godron 1986).

**Land Use Allocations** – The identification in a land use plan of the activities and foreseeable development that are allowed, restricted, or excluded for all or part of the planning area, based on desired future conditions (BLM 2005).

**Land Use Plan** – 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; an assimilation of land-use-plan-level decisions developed through the planning process outlined in 43 CRF 1600, regardless of the scale at which the decisions were developed. Also see RESOURCE MANAGEMENT PLAN.

**Late Seral Forest** – A forest that has evolved, through successional processes, near to the end of the successional line, or climax forest. Only through disturbance (fire or clear-cutting, for example) will the forest return to an earlier seral (successional) stage.

**Leasable Minerals** – Minerals whose extraction from federally managed land requires a lease and the payment of royalties. Leasable minerals include coal, oil and gas, oil shale and tar sands, potash, phosphate, sodium, and geothermal steam.

**Leave No Trace** – A nationwide (and international) program to help visitors with their decisions when they travel and camp on America's public lands. The program strives to educate visitors about the nature of their recreational impacts as well as techniques to prevent and minimize such impacts.

**Lek** – Traditional small open areas usually from 0.04 to 4 ha (0.1 to 10 acres) surrounded by sagebrush where sage-grouse gather to breed. (synonymous with strutting ground) (Call and Maser 1985) Occupied leks are traditional display areas in or next to sagebrush-dominated habitats that have been attended by  $\geq$  two male sage-grouse in  $\geq 2$  of the previous 5 years (Connelly and others 2000).

**Less-Than-Fee Interest** – Ownership of land with restricted rights. Also see FEE INTEREST.

**Let-Down Fences** – Fences that can be taken down but remain in place on the ground when they are not needed.

**Life History** – The combination of age-specific survival probabilities and fertilities characteristic of a species; the time-table of individual development and aging for a representative organism.

**Limited Operating Period** – A restriction placed on a management action as to when during the year an event can take place; to protect wildlife species and habitats.

## GLOSSARY

**Lithic Scatter** – Pertaining to or composed of stones that are dispersed; a form of an archaeological resource.

**Litter** – The uppermost layer of organic debris on the soil surface, essentially the freshly fallen or slightly decomposed vegetal material (NRCS 1997).

**Livestock Trespass** – The unauthorized grazing of livestock.

**Locatable Minerals** – Minerals subject to exploration, development and disposal by staking mining claims as authorized by the Mining Law of 1872 (as amended). Locatable minerals include valuable deposits of gold, silver, and other uncommon minerals not subject to lease or sale.

**Location** – The act of taking or appropriating a parcel of mineral land, including the posting of notices, the recording thereof when required, and marking the boundaries so they can be readily traced.

**Low-Income Population** – Persons living below the poverty level according to a particular total income for a family household of four persons and based on the most current data from the U.S. Bureau of Census. The average poverty threshold for a family of four in 1999, based on the most recent census data, was \$17,029.

**Low-Site Forest** – Forestland with at least 10% canopy cover and producing < 20 ft<sup>3</sup>/acre/year of commercial species. In northeast California, commercial species include Jeffrey pine, ponderosa pine, sugar pine, Washoe pine, Douglas-fir, white fir, and incense cedar. Also see OLD-GROWTH FOREST.

**Major Land Resource Areas (MRLAs) – Broad** geographic areas that are characterized by a particular pattern of soils, climate, water resources, vegetation, and land use. Each MLRA in which rangeland and forest land occur is further broken into range (ecological) sites (NRCS 1997). Also see LAND RESOURCE UNITS.

**Management Actions/Direction** – Measures planned to achieve the stated objectives.

**Management Activity** – An activity undertaken to harvest, traverse, transport, protect, change, replenish, or otherwise use resources.

**Management Framework Plans (MFPs)** – BLM land use plans that were prepared before 1985 and that have been replaced by resource management plans. Some MFPs are still in effect. Also see LAND USE PLAN and RESOURCE MANAGEMENT PLAN.

**Master Title Plat** – A plat map showing parcel boundaries and land status of lands, including public lands.

**Mastication (Mulching)** – In forestry, the chewing up of woody materials into a mulch that remains on the ground, protecting the soil, adding nutrients, and inhibiting the return of shrubs that need bare soil to germinate.

**Matrix** – The material that surrounds archaeological artifacts before they are excavated.

**Mechanical Fuels Treatments** – The use of mechanical equipment to suppress, inhibits, or control herbaceous and woody vegetation. BLM uses wheeled tractors, crawler-type tractors, mowers, or specially designed vehicles with attached implements for such treatments.

## GLOSSARY

**Mesic** – Characterized by having intermediate moisture conditions, i.e. neither decidedly wet nor decidedly dry.

**Metadata** – Data about data. Data that describes how and when and by whom a particular set of data was collected, and how the data is formatted.

**Mineral Entry** – The filing of a claim on public land to obtain the right to any minerals it may contain.

**Mineral Estate** – The ownership of the minerals at or beneath the land's surface.

**Mineralization** – The processes taking place in the earth's crust resulting in the formation of valuable minerals or ore bodies.

**Mineral Materials** – Materials such as common varieties of sand, stone, gravel, pumice, pumicite, and clay that are not obtainable under the mining or leasing laws but that can be acquired under the Mineral Materials Act of 1947, as amended.

**Mineral Withdrawal** – A formal order that withholds federal lands and minerals from entry under the Mining Law of 1872 and closes the area to mineral location (staking mining claims), development, and leasing.

**Minimum Pool** – The lowest level of reservoir capacity safe for maintaining fish and aquatic life or for some other designated beneficial purpose.

**Minimum Tool Principle** – A two-part analysis that is a guiding principle applied to wilderness management decisions: (1) Is the action needed to meet legitimate wilderness objectives; and (2) If the action is deemed necessary, what methods and equipment will accomplish the task with least impact on the physical, biological, and social characteristics of wilderness?

**Mining Claims** – Portions of public lands claimed for possession of locatable mineral deposits by locating and recording under established rules and pursuant to the Mining Law of 1872.

**Mining District** – An area, usually designated by name, with described or understood boundaries, where minerals are found and mined under rules prescribed by the miners, consistent with the Mining Law of 1872.

**Mining Law of 1872 (General Mining Law)** – The federal act that, with its amendments, formed the framework for the mining of locatable minerals on the public lands. This law declared that “valuable” mineral deposits rather than simply “mineral deposits” were to be free and open to exploration and purchase, limited individual claims to 20 acres, required \$100 worth of assessment work yearly, and allowed milling or processing claims of 5 acres or less to be entered on nonmineral lands.

**Minority** – Individuals classified by the Office of Management and Budget Directive No. 15 as Black/African, Hispanic, Asian and Pacific Islander, American Indian, Eskimo, Aleut, and other nonwhite persons.

**Minority Population** – Identified as either: (1) the minority population of the affected area exceeds 50%, or (2) population percentage of the affected area is meaningfully greater than the minority population percentage in the state or other appropriate unit of geographic analysis.

## GLOSSARY

**Mitigating Measures** – Modification of actions that (a) avoid impacts by not taking a certain action or parts of an action; (b) minimize impacts by limiting the degree of magnitude of the actions and its implementation, (c) rectify impacts by repairing, rehabilitating, or restoring the affected environment; (d) reduce or eliminate impacts over time by preservation and maintenance operations during the life of the action; or (e) compensate for impacts by replacing or providing substitute resources or environments.

**Monitoring** – The process of collecting information to evaluate if objectives and anticipated or assumed results of a management plan are being realized or if implementation is proceeding as planned.

**Mortality** – Death or destruction of forest trees as a result of competition, disease, insect damage, drought, wind, fire and other factors (excluding harvesting).

**Motorized Trail** – A designated route that allows for the use of small-wheel based motorized vehicles, such as all-terrain vehicles and motorcycles.

**Multiple Use** – The management of the public lands and their resources so that they are used 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 conform 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 non-renewable 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 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” (Federal Land Policy and Management Act 1976).

**National Ambient Air Quality Standards (NAAQS)** – The allowable concentrations of air pollutants in the ambient (public outdoor) air specified in 40 CFR 50. National ambient air quality standards are based on the air quality criteria and divided into primary standards (allowing an adequate margin of safety to protect the public health including the health of "sensitive" populations such as asthmatics, children, and the elderly) and secondary standards (allowing an adequate margin of safety to protect the public welfare). Welfare is defined as including effects on soils, water, crops, vegetation, human-made materials, animals, wildlife, weather, visibility, climate, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being.

**National Environmental Policy Act of 1969 (NEPA)** – The federal law, effective January 1, 1970, that established a national policy for the environment and requires federal agencies: (1) to become aware of the environmental ramifications of their proposed actions, (2) to fully disclose to the public proposed federal actions and provide a mechanism for public input to federal decision making, and (3) to prepare environmental impact statements for every major action that would significantly affect the quality of the human environment.

**National Fire Plan (NFP)** – A plan developed in August 2000 to actively respond to severe wildland fires and their impacts to communities while ensuring enough firefighting capacity for the future. The NFP addresses five key points: firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

**National Historic Preservation Act, As Amended (NHPA)** – A federal statute that established a federal program to further the efforts of private agencies and individuals in preserving the Nation’s historic and cultural foundations. The National Historic Preservation Act: (1) authorized the National Register of Historic Places, (2) established the Advisory Council on Historic Preservation and a National Trust Fund to administer grants for historic preservation, and (3) authorized the development of regulations to require federal agencies to consider the effects of federally assisted activities on properties included on or eligible for the National Register of Historic Places. Also see NATIONAL REGISTER OF HISTORIC PLACES and SECTIONS 106 and 110 OF THE NATIONAL HISTORIC PRESERVATION ACT.

**National Historic Trails** – Federally designated extended trails that closely follow original routes of nationally significant travel (explorers, emigrants, traders, and military). These trails do not have to be continuous, can be less than 100 miles long, and can include land and water segments. The Iditarod, Lewis and Clark, Mormon Pioneer, and Oregon Trails were the first national historic trails to be designated (in 1978).

**National Pollutant Discharge Elimination System (NPDES)** – A process for controlling the amount of pollution discharged into waters by requiring polluters to obtain NPDES permits from the states involved and to comply with discharge standards. The NPDES is mandated by the Federal Water Pollution Control Act Amendments.

**National Recreation Trails** – Trails that provide a variety of outdoor recreation uses in or reasonably accessible to urban areas and recognized by the Federal Government (Secretary of the Interior or Secretary of Agriculture, not Congress) as contributing to the National Trails System.

National Register – See NATIONAL REGISTER OF HISTORIC PLACES.

**National Register of Historic Places** – The official list, established by the National Historic Preservation Act, of the Nation’s cultural resources worthy of preservation. The National Register lists archeological, historic, and architectural properties (i.e., districts, sites, buildings, structures, and objects) nominated for their local, state, or national significance by state and federal agencies and approved by the National Register Staff. The National Park Service maintains the National Register. Also see NATIONAL HISTORIC PRESERVATION ACT.

**National Trails System** – The network of scenic, historic, and recreation trails created by the National Trails System Act of 1968. These trails provide for outdoor recreation needs; promote the enjoyment, appreciation, and preservation of open-air, outdoor areas, and historic resources; and encourage public access and citizen involvement.

**National Wild And Scenic Rivers System** – A system of nationally designated rivers and their immediate environments that have outstanding scenic, recreational, geologic, fish and wildlife, historical, cultural, and other similar values and are preserved in a free-flowing condition. The system consists of three types of streams: (1) recreation—rivers or sections of rivers that are readily accessible by road or railroad, 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 Species** – A plant or animal species that naturally occurs in an area and was not introduced by humans.

## GLOSSARY

**Naturalize** – To plant randomly, without a pattern to create the effect that the plants grew in that space without human help.

**Naturalized Species** – Those exotic species which are already occurring within defined areas in a self-sustaining wild state (e.g. English sparrow, ring-necked pheasant, chukar, brown trout, crested wheatgrass, red brome, cheat grass, Russian olive, and dandelion) (BLM 1992).

**Natural Vegetation Community** – Plant communities that develop in the absence of human activities.

**Neotropical Migratory Birds** – Birds that travel to Central America, South America, the Caribbean, and Mexico during fall to spend the winter and then return to the United States and Canada during spring to breed. These birds include almost half of the bird species that breed in the United States and Canada.

**Niche** – The place of an organism in its biotic environment; the position or function of an organism in a community of plants or animals; a microhabitat.

**Non-Impairment of Wilderness Values Criteria** – A set of criteria regulating land use to protect the wilderness values and characteristics of an area until Congress determines whether to preserve it as a wilderness. The nonimpairment criteria are as follows.

- The use, facility, or activity must be temporary. (This means a temporary use that does not create surface disturbance or involve permanent placement of facilities may be allowed if such use can easily and immediately be terminated upon wilderness designation.
- When the use, activity, or facility is terminated, the wilderness values must not have been degraded so far as to significantly constrain the area's suitability for preservation as wilderness.

The only permitted exceptions to the nonimpairment criteria are the following:

- wildfire or search and rescue emergencies,
- reclamation to minimize impacts of violations and emergencies,
- uses and facilities that are considered grandfathered or valid existing rights under the Interim Management Policy for Lands Under Wilderness Review.
- uses and facilities that clearly protect or enhance the land's wilderness values or are the least needed for public health and safety, and
- reclamation of pre-Federal Land Policy and Management Act impacts.

**Nonpoint Source Pollution (Water)** – Pollution sources that are diffuse and do not have a single point of origin or are not introduced into a receiving water body from a specific outlet. These pollutants are generally carried off the land by storm water runoff from such sources as farming, forestry, mining, urban land uses, construction, and land disposal.

**No Surface Occupancy (NSO)** – A fluid mineral leasing stipulation that prohibits occupancy or disturbance on all or part of the land surface to protect special values or uses. Lessees may access the oil and gas or geothermal resources under leases restricted by this stipulation through use of directional drilling from sites outside the NSO area.

**Notice-Level Operation** – A locatable mining or exploration operation involving more than casual use but disturbing an area of 5 acres or less, and therefore requiring that the operator submit only a notice rather than a plan of operations.

## GLOSSARY

**Noxious Plant (Weed)** – An unwanted plant specified by federal or state laws as being undesirable and requiring control. Noxious weed refers to any plant that, when established, is highly destructive, competitive, or difficult to control by cultural or chemical practices. Noxious weeds are usually non-natives and highly invasive.

**Nutrient Cycling (Cycle)** – The circulation of chemical elements such as carbon or nitrogen in specific pathways from the nonliving (abiotic) parts of the environment to organic substances (plants and animals), and then back again to abiotic forms.

**Objective** – A description of a desired condition for a resource. Objectives can be quantified and measured and, where possible, have established timeframes for achievement (BLM 2000b). Also see GOAL.

**Obligate** – Restricted to one particularly characteristic mode of life.

**Obsidian Hydration** – A dating method that measures the thickness of the hydration layer or "rind" of obsidian artifacts, because of the way that obsidian absorbs water.

**Occupancy Trespass** – The illegal occupation or possession of land or property.

**Off-Highway Vehicle (OHV)** – Any motorized track or wheeled vehicle designed for cross-country travel over natural terrain. OHVs exclude (1) any non-amphibious registered motorboat; (2) any fire, emergency, or law enforcement vehicle while being used for official or emergency purposes; and (3) any vehicle whose use is expressly authorized by a permit, lease, license, agreement, or contract issued by an authorized officer or otherwise approved. (The term "off-highway vehicle" is used in place of the term "off-road vehicle" to comply with the purposes of Executive Orders 11644 and 11989. The definition for both terms is the same.)

### **Off-Highway Vehicle (OHV) Use Designations**

**Open** – Designated areas and trails where OHVs may be operated subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343.

**Limited** – Designated areas and trails where OHVs are subject to restrictions limiting the number or types of vehicles, date, and time of use; limited to existing or designated roads and trails.

**Closed** – Areas and trails where OHV use is permanently or temporarily prohibited. Emergency use is allowed.

**OHV Play** – Nearly unrestricted OHV use whose object is more to have fun and excitement and to challenge one's driving skills than to drive anywhere in particular.

**OHV Play Area** – An area where on- or off-route OHV use is nearly unrestricted. Often attracting many riders, such areas may be on dunes, in sand and gravel pits, and in other areas that present challenges to OHV users.

**Old-Growth (Old Forest)** – Ecosystems distinguished by old trees and related structural attributes. The age at which old growth develops and the specific structural attributes that characterize old growth vary widely according to forest type, climate, site conditions, and disturbance regime.

## GLOSSARY

Most old growth is typically distinguished from younger growth by several of the following structural attributes: large trees for species and site; wide variation in tree sizes and spacing; accumulations of large, dead, standing and fallen trees (except in forest types with frequent, low-intensity fires); decadence in the form of broken or deformed tops or bole and root decay; multiple canopy layers (in some forest types); and canopy gaps and understory patchiness.

**Orographic** – Of or relating to mountains; *especially* associated with or induced by the presence of mountains <*orographic* rainfall> Produced by the forced ascent of warm air into cooler regions because a mountain range lies in its path.

**Outstandingly Remarkable Values** – Values among those listed in Section 1(b) of the Wild and Scenic Rivers Act: “scenic, recreational, geological, fish and wildlife, historical, cultural, or other similar values.” Other similar values that may be considered include ecological, biological or botanical, paleontological, hydrological, scientific, or research.

**Overstory** – The upper canopy or canopies of plants. Overstory usually refers to trees, tall shrubs, and vines (NRCS 1997).

**Paleontological Resources** – The remains of plants and animals preserved in soils and sedimentary rock. Paleontological resources are important for understanding past environments, environmental change, and the evolution of life.

**Particulate Matter** – Fine liquid (other than water) or solid particles suspended in the air, consisting of dust, smoke, fumes, and compounds containing sulfur, nitrogen, and metals.

**Pasturage** – Land covered with grass or other vegetation suitable for grazing animals.

**Pasture** – A subunit of a grazing allotment established and managed generally by building fences or, less commonly, by actively herding livestock.

**Patch** – A distinct area, such as a polygon or pixel, with a specific habitat type, cover type, or other homogeneous environmental condition.

**Patch Size** – The area constituting a separate piece of habitat for a species, where the piece is defined as the pixels (smallest mapping unit used to estimate environmental conditions) of habitat adjacent to one another or by some alternative rule set designed for a species.

**Patenting Lands** – Transferring lands out of government ownership for the first time.

**Payment in Lieu of Taxes (PILT)** – Federal payments to local governments to offset their inability to collect taxes for federally owned land.

**Pedestal** – A relatively slender column of soil or rock that is capped by a wider residual or erosional soil or rock.

**Perennial Plant** – A plant species with a life-cycle that characteristically lasts more than two growing seasons and persists for several years (FGDC 1997). Also see ANNUAL PLANT.

**Perennial Stream** – A stream or reach of a stream that flows continuously throughout the year and whose surface is generally lower than the water table adjacent to the region adjoining the stream (SCS 1993).

## GLOSSARY

**Permeability, Soil** – The ease with which gases, liquids (water), or plant roots penetrate or pass through a bulk mass of soil or a layer of soil. Since different soil horizons vary in permeability, the particular horizon under question should be designated.

**Permittee** – An individual or business that holds a valid grazing permit (43 CFR Subpart 4100 Grazing Administration-Exclusive of Alaska; General).

**Petroglyphs** – Pictures, symbols, or other art work pecked, carved, or incised on natural rock surfaces.

**pH (Hydrogen Ion Concentration)** – An expression of both acidity and alkalinity on a scale of 0 to 14, with 7 representing neutrality, numbers less than 7 indicating increasing acidity, and numbers greater than 7 indicating increasing alkalinity.

**Pitting** – Making shallow pits or basins of suitable capacity and distribution on range to reduce overland flow from rainfall and snowmelt.

**Placer** – An alluvial deposit of sand and gravel containing valuable minerals such as gold.

**Placer Claim** – A mining claim located on surficial or bedded deposits, particularly for gold located in stream gravels.

**Placer Deposit** – Mass of gravel, sand, or similar material resulting from the crumbling and erosion of solid rocks containing particles of gold or other valuable minerals that have been derived from rocks or veins.

**Planning Criteria** – The constraints or ground rules that guide the developing of a resource management plan. The criteria determine how the planning team develops alternatives and ultimately selects a Preferred Alternative.

**Plan of Operations** – A plan for mining exploration and development that an operation must submit to BLM for approval when more than 5 acres a year will be disturbed or when an operator plans to work in an area of critical environmental concern or a wilderness area. A plan of operations must document in detail all actions that the operator plans to take from exploration through reclamation.

**Plant Association** – See VEGETATION ASSOCIATION.

**Plant Community** – See COMMUNITY.

**Plant Vigor** – Plant health.

**Playa** – An ephemeral flooded area on a basin floor that is barren of vegetation, is veneered with fine-textured sediment, and acts as a temporary or final sink for drainage water.

**Pleistocene** – An epoch in Earth history from about 2-5 million years to 10,000 years ago, when the Earth experienced a series of glacial and interglacial periods.

**Ponding** – Runoff that collects in depressions and cannot drain out, creating temporary ponds; the process, occurring after a rainfall, of water gathering in low-lying areas, forming ponds.

**Population** – A group of interbreeding individuals of the same species often occupying the same geographical area.

**Possessory Interest Tax** – A tax on anyone who has exclusive use of a publicly owned property or facility.

**Potential Natural Community (PNC)** – The biotic community that would become established on an ecological site if all successional sequences were completed without human interference under the present environmental conditions. Natural disturbances are inherent in its development. The PNC may include acclimatized or naturalized nonnative species (NRCS 1997). Also see POTENTIAL NATURAL VEGETATION, DESIRED FUTURE CONDITION, and PROPER FUNCTIONING CONDITION.

**Potential Natural Vegetation (PNV)** – The stable biotic community that would become established on an ecological site if all successional stages were completed without human interference under present environmental conditions. The PNV is the vegetation type best adapted to fully use the resources of an ecological site.

**Potential Plant Community (PPC)** – The seral stage the botanical community would achieve if all successional sequences were completed without human interference under the present environmental conditions.

**Precious Metal** – A general term for gold, silver, or any of the minerals of the platinum group.

**Precommercial Thinning** – Cutting trees from a young stand so that the remaining trees will have more room to grow to marketable size. Trees cut in a precommercial thinning have no commercial value, and normally none of the felled trees are removed for use. Also see THINNING AND COMMERCIAL THINNING.

**Preferred Alternative** – The alternative in this EIS that BLM has initially selected because it best fulfills BLM's mission and responsibilities and offers the most acceptable resolution of the planning issues and management concerns.

**Prescribed Fire (Burning)** – The planned application of fire to rangeland vegetation and fuels under specified conditions of fuels, weather, and other variables to allow the fire to remain in a predetermined area to achieve such site-specific objectives as controlling certain plant species; enhancing growth, reproduction, or vigor of plant species; managing fuel loads; and managing vegetation community types.

**Prey Base** – Populations and types of prey species available to predators, for example fish species and populations available to river otters.

**Primary Road** – Regularly maintained route, paved or unpaved, wide enough for at least two vehicles to pass. A primary road provides access between two major points and serves a large area with many routes of lesser quality branching from it.

**Primitive Area** – A definition used in the Recreation Opportunity Spectrum (ROS) to characterize an area that is essentially an unmodified natural environment of large size, where interaction between users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorized use is not permitted.

**Primitive Campground** – An undesignated area within or outside the backcountry that lacks any facilities and is maintained only by use.

**Primitive Recreation** – Recreation that occurs in a natural-appearing environment and that allows visitors to achieve solitude and isolation from human civilization. Primitive recreation may include hunting, horseback riding, wildlife viewing, nature study, photography, hiking, and backpacking.

**Progression of Seral Stages (Succession)** – The progressive replacement of plant communities on an ecological site that leads to the climax community (e.g. early seral stages are normally dominated by perennial grasses and annual as well as perennial forbs with few shrubs. During mid seral the woody species that the site supports such as shrubs and trees begin to make an obvious appearance, and annual forbs are dominated by perennial forbs. During late seral stages the shrubs normally dominate the cover on the site, but the perennial grasses still provide the most annual production on into the potential natural community)( NRCS 1997). Also see POTENTIAL NATURAL COMMUNITY.

**Proper Functioning Condition (PFC) (Riparian-Wetland Areas)** – Riparian and Wetland areas are in properly functioning condition and are meeting regional and local management objectives. The riparian and wetland vegetation is controlling erosion, stabilizing streambanks, shading water areas to reduce water temperature, filtering sediment, aiding in floodplain development, dissipating energy, delaying floodwater, and increasing recharge of ground water that is characteristic for those sites. Vegetation surrounding seeps and springs is controlling erosion and reflects the potential natural vegetation for the site (BLM 1999a).

**Proper Functioning Condition (Uplands)** – Uplands are functioning properly when the existing vegetation and ground cover maintain soil conditions that can sustain natural biotic communities. The functioning condition of uplands is influenced by landform, soil, water, and vegetation.

**Proposed Threatened or Endangered Species** – Any species of fish, wildlife, or plant that is proposed in the FEDERAL REGISTER to be listed under Section 4 of the Endangered Species Act of 1973, as amended (50 CFR Part 402-Interagency Cooperation-Endangered Species Act of 1973, as Amended § 402.02 Definitions).

**Protocol Agreements between BLM and the Nevada and California State Historic Preservation Offices** – Agreements that specify the approach for cultural resources protection, including site identification, interpretation, protection, and stabilization.

**Public Lands** – Any land administered by the Secretary of the Interior through the U.S. Bureau of Land Management or by the Secretary of Agriculture through the U.S. Forest Service.

**Pyroclastics** – Particles of all sizes ejected into the air during volcanic eruptions, from volcanic ash to bombs and blocks.

**Radiocarbon Dating** – An age estimate based on the amount of a natural radioactive carbon isotope (carbon-14) that remains in any organic matter (formerly living things such as bone or plants or material made from living things such as cloth and leather).

**Rail Banking** – A practice of preserving abandoned rail rights-of-way to reuse them for transportation purposes in the future. Federal rail banking law allows railroads to bank unused rail corridors for future rail use while allowing interim use as trails.

**Rail Trail** – A multi-purpose public path (paved or natural) created along an inactive rail corridor.

**Range** – See RANGELAND.

**Range Drill** – A heavy duty seeding machine that is dragged over rough terrain by a tractor or dozer to seed areas. This type of drill is constructed heavy enough to withstand rough rangeland conditions, in contrast to a farm drill.

**Range Improvement** – Any activity or program on or relating to the public lands designed to improve forage production, change vegetation composition, control use patterns, provide water, stabilize soil and water conditions, or provide habitat for livestock and wildlife. Range improvements may be structural or nonstructural. A structural improvement requires placement or construction to facilitate the management or control the distribution and movement of animals. Such improvements may include fences, wells, troughs, reservoirs, pipelines, and cattleguards. Nonstructural improvements consist of practices or treatments that improve resource conditions. Such improvements include pitting; chiseling; seedings; prescribed burning; water spreaders, contour furrowing, and chemical, mechanical, and biological plant control.

**Rangeland** – A type of land on which the native vegetation, climax, or natural potential consists predominately of grasses, grasslike plants, forbs, or shrubs. Rangeland includes lands revegetated naturally or artificially to provide a plant cover that is managed like native vegetation. Rangelands may consist of natural grasslands, savannas, shrublands, moist deserts, tundra, alpine communities, coastal marshes, and wet meadows (NRCS 1977).

**Rangeland (Land) Health** -- The degree to which the integrity of the soil, vegetation, water, and air, as well as the ecological processes of the rangeland (land) ecosystem, are balanced and sustained. Integrity is defined as maintenance of the structure and functional attributes characteristic of a locale, including normal variability (Pellant and others 2000).

**Rangeland Composition** – A list of species present in an area, or discrete vegetation community, and the proportional abundance of each individual species.

**Rangeland (Land) Health Assessment** – An estimate or judgment of the status of ecosystem structures, functions, or processes, within a specified geographic area (preferably a watershed or a group of contiguous watersheds) at a specific time. Rangeland health is assessed by gathering, synthesizing, and interpreting information, from observations or data from inventories and monitoring. An assessment characterizes the status of resource conditions so that the status can be evaluated (see definition of evaluation) relative to land health standards. An assessment sets the stage for an evaluation. An assessment is not a decision (BLM 2001b).

**Rangeland (Land) Evaluation** – An evaluation is conducted to arrive at two outcomes. First, an evaluation conducts an analysis and interpretation of the findings resulting from the assessment, relative to land health standards, to evaluate the degree of achievement of Land Health Standards. Second, an evaluation conducts an analysis and interpretation of information—be it observations or data from inventories and monitoring—on the causal factors for not achieving a land health standard. An evaluation of causal factors provides the foundation for a determination (BLM 2001b).

**Rangeland (Land) Health Allotment Evaluation Reporting System** – A reporting system for grazing allotments as to how they relate to the following four categories:

**Category 1** – Areas where one or more standards are not being met, or significant progress is not being made toward meeting the standard(s) and livestock grazing is a significant contributor to the problem.

**Category 2** – Areas where all standards are being met or significant progress is being made toward meeting the standard(s).

## GLOSSARY

**Category 3** – Areas where the status for one or more standards is not known, or the cause of the failure to meet the standard(s) is not known.

**Category 4** – Allotments where one or more of the standards are not being met or significant progress is not being made toward meeting the standards due to causes other than (or in addition to) livestock grazing activities. (Allotments where current livestock grazing is also a cause for not meeting the standards are included in both Categories 1 and 4.)

**Rangeland Productivity** – The annual total forage availability of the vegetation for an area of rangeland.

**Raptors** – Birds of prey, such as eagles, owls, and hawks.

**Reach** – A relatively homogeneous section of a stream having a repetitious sequence of physical characteristics and habitat types.

**Record of Decision** – A document signed by a responsible official recording a decision that was preceded by the preparing of an environmental impact statement. Also see DECISION RECORD.

**Recovery** – The return of an unhealthy vegetation alliance, vegetation association, and ecological site back across the degradation threshold to its original community structure, natural complement of species, and natural functions. Also see RESTORATION.

**Recreation and Public Purposes Act of 1926** – An act of Congress that allows local governments (counties or cities) and nonprofit organizations to lease or acquire public land to be used for recreation or public purposes such as health, safety, or welfare.

**Recreation Management Zone** – In recreation management, an area with four defining characteristics: (1) it serves a different recreation niche within the primary recreation market, (2) it produces a different set of recreation opportunities and facilitates attaining different experiences and benefit outcomes, (3) it has a distinctive recreation setting character, and (4) it requires a different set of recreation provider actions to meet primary recreation market demand.

**Recreation Opportunity Spectrum (ROS)** – A planning process that provides a framework for defining classes of outdoor recreation environments, activities, and experience opportunities. In ROS, the setting, activities, and opportunities for experiences are arranged along a spectrum of six classes: Primitive, Semi-Primitive Non-Motorized, Semi-Primitive Motorized, Roaded Natural, Rural, and Urban. The resulting ROS analysis defines specific geographic areas on the ground, each of which encompasses one of the six classes.

**Recreation Site** – A developed site with such features as a trailhead, campground, or kiosk.

**Recruitment** – The successful entry of new individuals into the breeding population (Pellant and others 2000).

**Remnant Species** – Plant species present in a deteriorated plant association that are representative of a climax plant association.

**Research Natural Area (RNA)** – An area that is established and maintained for the main purpose of research and education because the land has one or more of the following characteristics: (1) a typical representation of a common plant or animal association; (2) an unusual plant or animal association; (3) a threatened or endangered plant or animal species; (4) a typical representation of common geologic, soil,

## GLOSSARY

or water features; or (5) outstanding or unusual geological, soil, or water features (43 CFR Subpart 8223-Research Natural Areas § 8223.0-5 Definitions).

**Residual Plant Cover** – Standing herbaceous vegetation that has cured and become decayed. When these plants fall, they become litter.

**Residue Analysis** – The study of remaining material traces that have been subjected to reductive physical or chemical processes.

**Resource Advisory Councils (RACs)** – Advisory councils appointed by the Secretary of the Interior and consisting of representatives of major public land interest groups (e.g. commodity industries and recreation, environmental, and local area interests) in a state or smaller area.

RACs advise BLM, focusing on a full array of multiple uses public land issues. RACs also help develop fundamentals for rangeland health and guidelines for livestock grazing (§ 4180.2 Standards and guidelines for grazing administration).

**Resource Conservation Area (RCA)** – A land management designation that provides management consideration to areas with special resources that do not need the levels of protection conferred by designation as an area of critical environmental concern (ACEC).

**Resource Management Plan (RMP)** – A land use plan as described by the Federal Land Policy and Management Act. The RMP generally establishes in a written document: (1) land areas for limited, restricted or exclusive use; designations, including ACEC designations; and transfer from BLM administration; (2) allowable resource uses (either singly or in combination) and related levels of production or use to be maintained; (3) resource condition goals and objectives to be attained; (4) program constraints and general management practices needed to achieve the above items; (5) need for an area to be covered by more detailed and specific plans; (6) support actions, including such measures as resource protection, access development, realty action, and cadastral survey., as needed to achieve the above; (7) general implementation sequences, where carrying out a planned action depends on prior accomplishment of another planned action; and (8) intervals and standards for monitoring and evaluating the plan to determine its effectiveness and the need for amendment or revision. It is not a final implementation decision on actions that require further specific plans, process steps, or decisions under specific provisions of law and regulations (43 CFR Subpart 1610-Resource Management Planning § 1610.0-5 Definitions).

**Rest** – The absence of livestock grazing to benefit plants for regrowth between grazing periods, for critical periods of plant growth, and development, or for critical periods of plant establishment (is synonymous with deferred grazing) (NRCS 1997).

**Restoration** – The act of restoring healthy but lacking key attributes and at-risk states of vegetation alliances, vegetation associations, and ecological sites to a healthy state with its original community structure, natural complement of species, and natural functions. Also see RECOVERY.

**Rest-Rotation Grazing** – Any grazing system that provides for the rotation of rest (see REST) among pastures. The period of rest can be for a full year or more, or a portion of the growing season. The time and length of rest generally changes each successive year (NRCS 1997).

**Retardant** – See FIRE RETARDANT.

**Right-of-Way (ROW)** – A permit or an easement that authorizes the use of public lands for specified purposes, such as pipelines, roads, telephone lines, electric lines, communication sites, reservoirs, and the lands covered by such an easement or permit.

## GLOSSARY

**Right-of Way Corridor** – A parcel of land that has been identified by law, Secretarial order, or through a land use plan or by other management decision as being the preferred location for existing and future right-of-way grants and suitable for one type of right-of-way or one or more rights-of-way that are similar, identical, or compatible.

**Rill** – A small channel formed by soil erosion.

**Riparian** – Area, zone, and/or habitat adjacent to streams, lakes, or other natural free water, which have a predominant influence on associated vegetation or biotic community (NRCS 1997); pertaining to or situated on or along the bank of a stream or other water body.

**Riparian Area/Riparian Zone** – Terrestrial areas where the vegetation complex and microclimate conditions are products of the combined presence and influence of perennial or intermittent water, high water tables, and soils that exhibit some wetness characteristics. These terms are normally used to refer to the zone within which plants grow rooted in the water table of these rivers, streams, lakes, ponds, reservoirs, springs, marshes, seeps, bogs, and wet meadows.

**Riparian Community Type** – A repeating, classified, defined, and recognizable assemblage of riparian plant species (USDA NRCS 1997).

**Riparian Ecosystems** – Ecosystems that occur along watercourses or water bodies. They distinctly differ from surrounding lands because of unique soil and vegetation characteristics that are strongly influenced by free or unbound water in the soil (NRCS 1997).

**Riparian Rights** – The rights of a land owner to the water on or bordering his property, including the right to prevent diversion or misuse of upstream water.

**Riparian Species** – Plant species occurring within the riparian zone. Obligate species require the environmental conditions within the riparian zone; facultative species tolerate the environmental conditions and therefore may also occur away from the riparian zone (NRCS 1997).

**Riparian Vegetation – Plant** communities in the riparian zone consisting of riparian species (NRCS 1997).

**Riprap** – Large pieces of rock (usually 6 to 30 inches in diameter) that have undergone only primary crushing and sizing, or larger, uncrushed pieces. Riprap is used to stabilize slopes and shorelines and build erosion-control structures.

**Road** – A transportation facility used mainly by vehicles having four or more wheels documented as such by the owner, and maintained for regular and continuous use. Also see ROUTE, TRAIL, PRIMARY ROAD and SECONDARY ROAD.

**Root Ball** – The network of roots and the soil clinging to them when a plant is lifted from the soil or removed from a container.

**Root Reserve** – The ability of plants to store energy (which has been converted from sunlight and water and nutrients from the soil) in their roots to promote plant growth. Overgrazing reduces root reserves, which leads to fewer leaves and a weaker root system.

## GLOSSARY

**Route** – Any motorized, nonmotorized, or mechanized, terrestrial or water transportation corridor. Roads and trails are considered routes. Also see ROAD and TRAIL.

**Runoff** – The portion of precipitation or irrigation on an area that does not infiltrate (enter the soil) but is discharged by the area (Pellant and others 2000)

**Run-on** – Water that flows onto a given area.

**R Value** – Response “R” values are given to condition classes of sagebrush habitat to reflect that vegetation association’s ability to respond favorably to management or mechanical treatment (Northeast California Sage-grouse Working Group 2005)

**Safety Zone** – An area cleared of flammable materials used for escape in the event the fireline is outflanked or in case a spot fire causes fuels outside the control line to render the line unsafe.

**Sagebrush-Steppe Community** – A semiarid plant community characterized by a predominance of big sagebrush and other sagebrush species, plus grasses and forbs

**Sagebrush Obligate** – A species that is restricted to sagebrush habitats during the breeding season, or year-round.

**Saleable Minerals** – High volume, low-value mineral resources, including common varieties of rock, clay, decorative stone, sand, and gravel.

**Salvage Logging (Harvest)** – The removal of dead or downed commercially valuable timber after a disturbance (fire, wind, insect attack, or disease).

**Satellite Wild Horse and Burro Adoption** – An adoption held away from BLM corrals and facilities at such places as fairgrounds and rodeo grounds that have horse facilities.

**Sawlog** – A log large enough to yield lumber. Usually the small end of a sawlog must be at least 6 to 8 inches in diameter for softwoods and 10 to 12 inches for hardwoods.

**Scenic Byway** – A public road having special scenic, historic, recreational, cultural, archaeological, or natural qualities that have been recognized as such through legislation or some other official declaration.

**Scoping** – An early and open process for determining the scope of issues to be addressed in an environmental impact statement and the significant issues related to a proposed action (40 CFR Part 1508-Terminology and Index).

**Secondary Road** – A regularly maintained paved or unpaved one-to-two-lane route with routes of less quality branching from it. A secondary road connects primary roads and major points.

**Section 404 Permit** – A permit required by the Clean Water Act, under specified circumstances, when dredge or fill material is placed in the waters of the United States, including wetlands.

**Section 7** – The section of the Endangered Species Act of 1973, as amended, outlining procedures for interagency cooperation to conserve federally listed species and designated critical habitats. Section 7(a)(1) requires federal agencies to use their authorities to further the conservation of listed species. Section 7(a)(2) requires federal agencies to consult with the services to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Other paragraphs of this section:

- establish the requirement to conduct conferences on proposed species;
- allow applicants to initiate early consultation;
- require U.S. Fish and Wildlife Services and National Marine Fisheries Service to prepare biological opinions and issue incidental take statements.

Section 7 also establishes procedures for seeking exemptions from the requirements of Section 7(a)(2) from the Endangered Species Committee (USFWS and NMFS 1998).

**Section 7 Consultation** – The Section 7 processes, including both consultation and conference if proposed species are involved (50 CFR Part 402-Interagency Cooperation-Endangered Species Act of 1973, As Amended).

**Section 106 of the National Historic Preservation Act** – The section of the National Historic Preservation Act that requires that federal agencies having direct or indirect jurisdiction over a proposed federal, federally assisted, or federally licensed undertaking, before approving the spending of funds or issuing a license, consider the effect of the undertaking on any district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places, and give the Advisory Council on Historic Preservation a reasonable opportunity to comment on the undertaking. Also see NATIONAL HISTORIC PRESERVATION ACT and NATIONAL REGISTER OF HISTORIC PLACES, and SECTION 110 OF THE NATIONAL HISTORIC PRESERVATION ACT.

**Section 110 of the National Historic Preservation Act** – The section of the National Historic Preservation Act that concerns the managing of federally owned historic properties. Among other provisions, Section 110 requires each federal agency to establish a program to locate, inventory, and nominate to the Secretary of the Interior all properties under its control that appear to qualify for the National Register of Historic Places. Also see NATIONAL HISTORIC PRESERVATION ACT, NATIONAL REGISTER OF HISTORIC PLACES, and SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT.

**Sedimentation** – The act or process of depositing sediment from suspension in water; all the processes by which particles of rock material are accumulated to form sedimentary deposits.

**Sediment Intrusion Buffer** – A buffer that helps prevent sediment generated through soil erosion during overland water flow from entering a body of water. Buffer widths are determined by soil erodibility, which is influenced by soil type, slope, and upland soil and vegetation condition upslope from the buffer. Buffers can be vegetative or mechanical.

Vegetation buffers are usually naturally occurring, soil-holding native vegetation or are areas that have been reseeded using suitable soil-holding local native species. Mechanical buffers include contour furrows, contour trenches, and erosion fencing (Brooks and others 1991).

**Sediment Load (Sediment Discharge)** – The amount of sediment, measured in dry weight or by volume, that is transported through a stream cross-section in a given time. Sediment load consists of sediment suspended in water and sediment that moves by sliding, rolling, or bounding on or near the streambed.

## GLOSSARY

**Seed Viability** – A seed’s capability of germinating and growing.

**Seeding** – The planting of seeds to revegetate the land after a disturbance; an area that has been revegetated by seeding.

**Seeds of Success** – An interagency program that is coordinated through the Plant Conservation Alliance and that supports and coordinates seed collection of native plant populations in the United States to increase the number of species and the amount of native seed that is available for use in stabilizing, rehabilitating, and restoring lands in the United States.

**Scenic Area** – The portion of the landscape that is visible from roads, trails, rivers, campgrounds, communities, or other key observation points.

**Self Contained Camping** – Primitive camping in undeveloped areas where the camper provides everything needed for camping and follows Leave No Trace practices to minimize impacts to the land.

**Sensitivity (Cultural Resource)** – How prone a cultural resource site is to outside impacts.

**Seral Stages** – The development stages of ecological succession (NRCS 1997).

**Shared Use Trail** – A trail shared for a variety of uses such as motorized and nonmotorized uses; a combination of nonmotorized uses such as hiking, horseback riding, and bicycling; or a combination of motorized uses such as dirt bikes and small and large four-wheel vehicles.

**Sheet Erosion** – The uniform washing or eroding of surface soils on a large denuded surface area.

**Shrub-Steppe Community** – A plant community of low drought-tolerant shrubs and bunch grasses. A community consisting of one or more layers of perennial grass above which raises a conspicuous but discontinuous layer of shrubs.

**Sikes Act Implementation Plans** – Comprehensive integrated natural resource management plans based on ecosystem management and required by Public Law 105-85, the Sikes Act Reauthorization Act of 2003. Under this law, the Department of Defense must complete such a plan for all of its installations that have significant fish, wildlife or natural resources.

The law requires that these plans include fish and wildlife management and wildlife-oriented recreation; fish and wildlife habitat enhancement; wetland protection; the setting of specific management goals; and the public use of natural resources. These plans must be written in consultation with the U.S. Fish and Wildlife Service and the affected states and must undergo a formal review process every 5 years.

**Silviculture** – The branch of forestry concerned with cultivating trees.

**Site Index** – An expression of a site’s ability to produce wood growth relative to other sites, expressed in height growth over a century. A site index of 120, therefore, means that a tree will grow from 0 to 120 feet in 100 years.

**Sixth-Level Watershed** – See STREAM ORDER.

**Snag** – A standing dead tree that provides food and habitat for creatures such as insects and tree-nesting birds.

## GLOSSARY

**Soil Bioengineering** – An applied science that combines structural, biological, and ecological concepts to build living structures to control erosion, sediment, and floods. Soil bioengineering is always based on sound engineering practices integrated with ecological principles.

**Soil (Ground) Cover** – Plants or plant parts, living or dead, on the surface of the ground.

**Soil Classification** – The systematic arrangement of soil units into groups or categories by their characteristics. Broad groupings are made on the basis of general characteristics and subdivisions on the basis of more detailed differences in specific properties (Pellant and other 2002).

**Soil Compaction** – Compression of the soil, resulting in reduced soil pore space (the spaces between soil particles), decreased movement of water and air into and within the soil, decreased soil water storage, and increased surface runoff and erosion.

**Soil Fertility** – The ability of a soil to support plant growth by providing water, nutrients, and a growth medium.

**Soil Horizon** – A layer of soil or soil material roughly parallel to the land surface and differing from adjacent, genetically related layers in physical, chemical, and biological properties or characteristics, such as color, structure, texture, consistence, degree of acidity or alkalinity, and kinds and numbers of organisms present.

**Soil Productivity** – The capacity of a soil in its normal environment for producing a specified plant or sequence of plants under a specified system of management.

**Soil Profile** – A vertical section of the soil from the surface through all of its horizons.

**Soil/Site Stability** – The capacity of a site to limit redistribution and loss of soil resources (including nutrients and organic matter) by wind and water (one of the three attributes of rangeland (land) health) (Pellant and others 2000).

**Soil Structure** – The combination or arrangement of primary soil particles into secondary units or peds, which are characterized by size, shape, and grade. Soil structure largely determines the soil's pore space and density, which affect the soil's ability to hold air and water.

**Spawning Gravels** – Stream-bottom gravels where fish deposit and fertilize their eggs. The covering of these gravels with silt can block the supply of oxygen to the eggs or serve as a cementing agent to prevent fry from emerging.

**Special Category Lands** – Lands where locatable mining operations always require plans of operations, regardless of the amount of land that would be involved. Special category lands include the following areas:

- areas in the National Wild and Scenic Rivers System and areas designated for potential addition to the system;
- designated areas of critical environmental concern (ACECs); and
- areas designated as closed to off-highway vehicle (OHV) use (as defined in 43 CFR 8340-5); lands or waters known to contain federally proposed or listed threatened or endangered species, or their proposed or designated critical habitat.

**Special Interest Plants** – Plants on List 2 (not including List 2 plants that are already on the BLM sensitive list) and List 4 in the California Native Plant Society’s Inventory of Rare and Endangered Plants of California (Rare Plant Scientific Advisory Committee 2001).

These plants are considered rare by the scientific community but are not included in BLM’s sensitive plant list. These plants receive no legal protection but are managed, where possible, on a case-by-case basis by individual field offices to maintain populations and reproductive viability.

**Special Management Areas** – Areas that may need special management, such as management as an ACEC, RNA, environmental education area, or other special category.

**Special Recreation Management Area (SRMA)** – An area of intensive recreation use where a commitment has been made to provide specific recreation activity and experience opportunities. SRMAs usually require a high level of recreation investment or management. SRMAs include recreation sites, but recreation sites alone do not constitute SRMAs. Also see EXTENSIVE USE AREA and RECREATION MANAGEMENT ZONE.

**Special Recreation Permit (SRP)** – An authorization that allows for specific nonexclusive permitted recreational uses of the public lands and related waters. SRPs are issued to control visitor use, protect recreational and natural resources, provide for the health and safety of visitors, and accommodate commercial recreational uses.

**Special Status Species** – Plant or animal species falling in any of the following categories:

- threatened or endangered species
- proposed threatened or endangered species
- candidate species
- state-listed species
- BLM sensitive species
- BLM special-interest species

Also see SPECIAL INTEREST PLANTS.

**Species** – From Section 3(15) of the Federal Endangered Species Act: “The term 'species' includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature.” A population of individuals that are more or less alike and that can breed and produce fertile offspring under natural conditions.

**Species Composition** – The proportions of plant species in relation to the total on a given area. It may be expressed in terms of cover, density, or weight (Pellant and others 2000).

**Split-Estate** – Land whose surface rights and mineral rights are owned by different entities. Such a condition commonly occurs when surface rights are owned by the Federal Government and the mineral rights are privately or state owned.

**Stabilization (Cultural Resource)** – Protective techniques usually applied to structures and ruins to keep them in their existing condition, prevent further deterioration, and provide structural safety without significant rebuilding. Capping mud-mortared masonry walls with concrete mortar is an example of a stabilization technique.

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

**Standards and Guidelines (Northeastern California and Northwestern Nevada Standards for Rangeland Health and Guidelines for Livestock Grazing Management)** – Standards and guidelines developed collaboratively by BLM and the Resource Advisory Council (RAC) to address the minimum requirements of the Department of the Interior’s final rule for grazing administration, effective August 21, 1995.

**Standards for Rangeland (Land) Health** – A description of conditions needed to sustain public land health; relates to all uses of the public land. Standards for Northeastern California and Northwestern Nevada were developed by the State Director in consultation with the Northeast California Resource Advisory Council (RAC) as directed in 43 CFR § 4180.2. These standards are applied to all lands administered by the BLM in northeast California and northwest Nevada (Appendix B) and address upland soils, streams, water quality, riparian-wetlands, and biodiversity (BLM 2000a).

**Standing Volume** – The total volume of wood contained in stems of trees of all size classes in cubic meters. The standing volume includes some nonrecoverable volume but excludes bark.

**Stand Replacement Fire Regime** – A regime in forests, shrublands, or grasslands in which fires kill or top-kill aboveground parts of the dominant vegetation, substantially changing the aboveground structure. About 80% or more of the aboveground dominant vegetation is either consumed or dies as a result of the fire.

**State** – One or more biological (including soil) communities that occur on a particular ecological site and that are functionally similar in respect to the three attributes (soil and site stability, hydrologic function, and biotic integrity). States are distinguished by relatively large differences in plant functional groups, soil properties, and ecosystem processes and, consequently, in vegetation structure, biodiversity, and management requirements. They are also distinguished by their responses to disturbance. A number of different plant communities may be included in a state, and the communities are often connected by traditionally defined successional pathways (Herrick and others 2005).

**State Historic Preservation Officer (SHPO)** – The state official authorized to act as a liaison to the Secretary of the Interior for implementing the National Historic Preservation Act of 1966.

**State-Listed Species** – Species listed by a state in a category implying but not limited to potential endangerment or extinction. Listing is either by legislation or regulation.

**Stewardship Contract** – A contract BLM enters into for services to achieve land management goals and meet local and rural community needs, for which a source for performance must be selected on a best-value basis. Section 323 of Public Law 108-7, the Consolidated Appropriations Resolution, 2003, authorizes trading goods for services and multi-year contract authority between 5 and 10 years.

**Stipulation** – A condition or requirement attached to a lease or contract, usually dealing with protection of the environment or recovery of a mineral.

**Stock (Fish)** – A group of fish that is genetically self-sustaining and isolated geographically or temporally during reproduction. Generally, stock refers to a local population of fish.

**Stocking Rate** – The number of specific kinds and classes of animals grazing or using a unit of land for a specific period. Stocking rates may be expressed as a ratio, such as of animal units/section, acres/animal unit, or acres/animal unit month.

**Streambanks** – The usual boundaries, not the flood boundaries, of a stream channel. Right and left banks are named facing downstream (in the direction of flow).

**Streambank Stability** – A streambank's relative resistance to erosion, which is measured as a percentage of alteration to streambanks.

**Stream Channel** – The bed where a natural stream of water runs or may run; the long narrow depression shaped by the concentrated flow of a stream and covered continuously or periodically by water.

**Stream Channel Integrity (Stability)** – A relative measure of the resistance of a stream to erosion. Stable streams do not change markedly in appearance from year to year. An assessment of stability helps determine how well a stream will adjust to and recover from changes in flow or sediment transport.

**Stream Order** – A method of numbering streams as part of a drainage basin network. The smallest unbranched mapped tributary is called first order, the stream receiving the tributary is called second order, and the stream receiving that tributary is called the third order, and so on. Stream order may depend on the scale of the map used. A first-order stream on a 1:62,500 map may be a third-order stream on a 1:12,000 map.

**Structural Diversity** – Variety in a vegetation type that results from layering or tiering of the canopy and understory and the dieback, death and ultimate decay of plants; the diversity of the composition, abundance, spacing, and other attributes of plants in a community.

**Structure** – The height and area occupied by different plants or life forms in a community.

**Stubble** – The basal portion of herbaceous plants remaining after the top portion has been harvested either artificially or by grazing animals.

**Subdominant Species** – An important species within a plant community, but one that is less prevalent, smaller, or less important than the dominant species. Also see DOMINANT SPECIES

**Subeconomic Mineral** – A mineral that at present is unavailable for use because of the high cost of extraction.

**Substrate** – Mineral and organic material forming the bottom of a waterway or water body; the base or substance upon which an organism is growing.

**Succession** – The progressive replacement of plant communities on an ecological site that leads to the climax community. Early seral stages are normally dominated by perennial grasses and annual as well as perennial forbs with few shrubs. During mid seral the woody species that the site supports such as shrubs and trees begin to make an obvious appearance, and annual forbs are dominated by perennial forbs. During late seral the shrubs normally dominate the cover on the site, but the perennial grasses still provide the most annual production on into the potential natural community (NRCS 1997). Also see POTENTIAL NATURAL COMMUNITY.

**Suckering** – A common method of asexual reproduction in the willow family by which suckers sprout up from the roots of mother trees, forming new trees.

## GLOSSARY

**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, as specified in Section 4(a) of the Wild and Scenic Rivers Act.

**Suite** – A group or array of characteristics associated with a given organism or species.

**Suppression** – A management action intended to protect values from a fire, extinguish a fire, or alter a fire's direction of spread.

**Surface Fuels** – Needles, leaves, grass, forbs, dead and down branches and boles, stumps, shrubs, and short trees.

**Sustained Yield** – Achieving and maintaining a permanently high level, annual or regular period production of renewable land resources without impairing the productivity of the land and its environmental values (FLPMA 1976).

**Sylvaglyphs (Dendroglyphs)** – Historic carvings found on the bark of smooth-bark trees, often aspens.

**Take** – To harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct (Endangered Species Act § 3 (19) 1973). Harm is further defined by the U.S. Fish and Wildlife Service (USFWS) as to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. USFWS defines Harass as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns that include breeding, feeding, or sheltering (50 CFR Part 17-Endangered And Threatened Wildlife And Plants§ 17.3 Definitions).

**Talus** – A sloping heap of loose rock fragments lying at the foot of a cliff or steep slope.

**Taylor Grazing Act** – An act passed in 1934 that provides for the regulation of grazing on the public lands (excluding Alaska) to improve rangeland conditions and stabilize the western livestock industry.

**Terms and Conditions** – The provisions and stipulations specified by BLM as part of a livestock grazing permit or other land use authorization.

**Terracette** – Benches of soil deposition behind obstacles caused by water, not wind, erosion (Pellant and others 2000).

**Thinning** – A tree removal practice that reduces tree density and competition between trees in a stand. Thinning concentrates growth on fewer, high-quality trees, provides periodic income, and generally enhances tree vigor. See COMMERCIAL THINNING and PRECOMMERCIAL THINNING.

**Thinning from Below** – The removal of trees from the middle and upper crown classes in a stand, to favor the most promising trees of these classes.

**Threatened Species** – Any species defined through the Endangered Species Act (ESA) as likely to become endangered within the foreseeable future throughout all or a significant portion of its range, as published in the *Federal Register* (ESA § 3 (20) 1973). Also see ENDANGERED SPECIES.

## GLOSSARY

**Threshold** – A transition boundary that an ecosystem crosses that results in a new stable state that is not easily reversed without significant inputs in resources (Herrick and others 2005). Ecological thresholds describe a complex set of potentially interacting components, rather than discrete boundaries in time and space. “A specific disturbance or event may trigger the occurrence of a threshold that effects both structural and functional modifications during ecosystem transitions at various time scales.” “The potential for threshold reversibility depends upon the extent and duration of ecosystem modifications, especially those altering nutrient and water cycles and energy flow pathways” (Briske and others 2005). “One or more of the primary ecological processes has been irreversibly changed and must be actively restored before return to the pervious state is possible” (Stringham and others 2003).

**Trace Metals** – Metals that are present in small concentrations.

**Traditional Cultural Property (TCP)** – A property that is eligible for the National Register of Historic Places because of its association with a living community’s cultural practices or beliefs that are important in maintaining the continuing community’s cultural identity. TCPs are essential to maintaining the cultural integrity of many Native American Indian nations and are critical to the cultural lives of many of their communities.

**Trail** – A linear route managed for human-powered, stock, or off-highway vehicle forms of recreation or for historic or heritage values. Trails are not generally managed for use by four-wheel drive or high-clearance vehicles. Also see ROUTE and ROAD.

**Trail Alignment** – The topographic location of a trail in relation to local landforms. Trail alignment can be expressed by the slope alignment angle. Trails can be aligned parallel to the prevailing slope (0° angle), perpendicular to the slope (90° angle), or at any angle in between (1 - 89° angle).

**Trailing** – Controlled directional movement of livestock; the habit of livestock or wildlife of repeatedly treading in the same line or path.

**Trail Tread** – The walking surface of a trail.

**Transition** – A shift from one state to another on an ecological site, or within vegetation alliances or associations (NRCS 1997).

**Trailhead** – The terminus of a hiking, horse, or bicycle trail accessible by motor vehicles.

**Tread Lightly** – An educational program designed to instill outdoor ethics of responsible behavior when participating in outdoor activities.

**Trespass:** – Any occupancy, use, or development of the public lands or their resources of the United States without authority.

**Trophic Level** – The level in a nutritive series of an ecosystem in which a group of organisms in a certain stage in the food chain secures food in the same general manner. The first or lower trophic level consists of producers (green plants), the second level consists of herbivores, the third level consists of secondary carnivores, and the fourth level consists of reducers (decomposers).

## GLOSSARY

**Trust Allotment** – Federal land set aside for the exclusive use of an Indian, who is the allottee. The Federal Government retains land ownership. Many allotments are outside Indian reservations and are called public domain allotments. (Forest Service National Resource Guide to American Indian and Alaska Native Relations at <http://www.fs.fed.us/people/tribal/>)

**Trust Responsibility** – This term has never been defined by the U.S. Congress, any president, or any cabinet official. Generally, a set of principles and concepts outlining the responsibilities of the U.S. Government to act as the trustee of Indian people and Indian-owned assets. The U.S. Government, through the President, has certain responsibilities to protect Indian property and rights, Indian lands, and resources. The trust responsibility may involve a fiduciary obligation in which the President, through the Secretary of the Interior, acts as the trustee of the Indian assets. Fulfilling or redeeming a trust responsibility can best be reflected or demonstrated as a matter of action; a stream that was protected, a site that was maintained intact, a property right that has been left unaffected by a federal action. The writing of an environmental document is not an example of fulfillment of a trust responsibility. (Forest Service National Resource Guide to American Indian and Alaska Native Relations at <http://www.fs.fed.us/people/tribal/>.)

**Turbidity** – A measure of cloudiness of water, which is a function of the suspended organic and inorganic material.

**Turn Out Area** – A location within an allotment or grazing area where livestock are placed to achieve management objectives, generally at the beginning of the grazing season but possibly throughout the grazing season as livestock are moved into new use areas.

**Unallotted Lands** – Public lands that are open to grazing but currently have no livestock grazing authorized.

**Underburning** – Prescribed burning under a timber canopy.

**Understory** – Plants growing under the canopy of other plants. Understory usually refers to grasses, forbs, and low shrubs under a tree or brush canopy.

**Ungulates** – **Hoofed** animals, including ruminants such as cows, sheep, goats, and deer, but also horses, tapirs, elephants, rhinoceroses, and swine.

**Upland Game** – A term used in wildlife management to refer to hunted animals that are neither big game nor waterfowl. Upland game includes such birds as grouse, turkey, pheasant, quail, and dove, and such mammals as rabbit and squirrel.

**Uplands** – Lands at higher elevations than alluvial plains or low stream terraces; all lands outside the riparian wetland and aquatic zones.

**Utilization** – The proportion of the current year's forage production that is consumed or destroyed by grazing animals. Utilization may refer to a single species of forage or to all forage as a whole.

**Utility Corridor** – A parcel of land, without fixed limits or boundaries, that is being used as the location for one or more utility rights-of-way (43 CFR Part 2800-Use; Rights-Of-Way, Principles and Procedures § 2800.0-5 Definitions).

## GLOSSARY

**Valid Existing Rights** – Locatable mineral development rights that existed when the Federal Land Policy and Management Act (FLPMA) was enacted on October 21, 1976. Some areas are segregated from entry and location under the Mining Law to protect certain values or allow certain uses. Mining claims that existed as of the effective date of the segregation may still be valid if they can meet the test of discovery of a valuable mineral required under the Mining Law. Determining the validity of mining claims located in segregated lands requires BLM to conduct a validity examination and is called a “valid existing rights” determination.

**Vascular Plants** – Any of various plants, such as the ferns and seed-bearing plants, in which the phloem transports sugar and the xylem transports water and salts.

**Vault Toilet** – An outdoor toilet without running water that has a sealed underground vault for holding wastes and from which waste is pumped out.

**Vector** – Any person, animal or a thing that carries the seeds of noxious weeds from one place to another and promotes their invasion and spread.

**Vegetation Alliance** – A vegetation classification unit containing one or more associations, and defined by a characteristic range of species composition, habitat conditions, physiognomy, and diagnostic species, typically at least one of which is found in the uppermost or dominant stratum of the vegetation (E.g. Forestland, Shrubland) (ESA 2004).

**Vegetation Association** – A vegetation classification unit defined by a characteristic range of species composition, diagnostic species occurrence, habitat conditions, and physiognomy (e.g. Mountain big sagebrush/perennial grass) (ESA 2004).

**Vegetative Fuel Break System** – Planned corridors of vegetation to break-up large blocks of highly flammable species such as cheatgrass, to improve fire suppression effectiveness. These breaks are planned to be compatible with, and take advantage of, resource development such as seedings and natural barriers (BLM 1985).

**Vertisols** – Dark black soils rich (at least 30%) in expandable clay that readily swells when wet and shrinks when dried. Vertisols are one of the U.S. Department of Agriculture soil orders.

**Viable Population** – Wildlife or plant population that contains an adequate number of reproductive individuals to appropriately ensure the long-term existence of the species (Noss and Cooperrider 1994).

**Viewshed** – The entire area visible from a viewpoint.

**Vigor** – The capacity for natural growth and survival of plants and animals.

**Visual Resource Management (VRM)** – The inventory and planning actions to identify visual values and establish objectives for managing those values and the management actions to achieve visual management objectives.

**Visual Resource Management (VRM) Classes** – Categories assigned to public by scenic quality, sensitivity level, and distance zones. Each class has an objective that prescribes the amount of modification allowed in the landscape. The four classes are as follows:

## GLOSSARY

**Class I:** The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes, but it does not preclude very limited management activities. The level of change to the characteristic landscape should be very low and must not attract attention.

**Class II:** 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 change must repeat the basic element of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

**Class III:** The objective of this class is to partially retain the landscape's existing character. 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 in the predominant natural features of the characteristic landscape.

**Class IV:** The objective of this class is to provide for management activities that require major changes to the landscape's existing character. 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's attention. But every attempt should be made to minimize the impact of these activities by careful location, minimal disturbance, and repeating the basic elements of the characteristic landscape.

**Waterfowl Nesting Island** – A wildlife habitat improvement that consists of a vegetated mound of dirt built in a lake or reservoir to provide cover and distance from the shoreline for nesting waterfowl.

**Water Quality – Within** the context of the Land Health Standards, water quality means that “water will have characteristics suitable for existing and potential beneficial uses. Surface and groundwater complies with objectives of the Clean Water Act and other applicable water quality requirements, including meeting the California and Nevada State standards, excepting approved variances” (BLM 2000a).

**Water Reserve** – An area set aside for the protection and use of water on or under the land for public water supplies.

**Water Right** – A right to use, in accord with its priority, a certain portion of the waters of the state for irrigation, power, domestic use or another similar use

**Watershed** – An area of land from which water drains toward a single stream. The watershed is a hydrologic unit often used as a physical-biological unit and a socioeconomic-political unit for planning and managing natural resources.

**Waters of the State** – All streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies of water above or below ground that are partially or wholly within a state. Private waters that do not combine or have a junction with natural surface or underground waters are not included (such as an isolated stock pond that does not infiltrate to groundwater or connect to surface water).

**Water Table (Ground Water Table)** – The level of groundwater; the upper surface of the zone of saturation for underground water. The water table is an irregular surface with a slope or shape determined by the amount of groundwater and the permeability of the earth material.

**Way** – A travel route that was not constructed but rather was worn onto the surface of the land by repeat passage of vehicles. Also see EXISTING WAYS.

## GLOSSARY

**Wetlands or Wetland Habitat** – Areas characterized by soils that are usually saturated or ponded; i.e., hydric soils, and that support mostly water-loving plants; i.e. hydrophytic plants (NRCS 1997). Wetlands generally include swamps, marshes, bogs, and similar areas.

**Weed Management Areas (WMAs)** – Local organizations that bring together landowners and managers (private, city, county, state, and federal) in a county, multi-county, or other geographical area to coordinate efforts and expertise against common invasive weed species.

**Wikiup** – A temporary dwelling of nomadic Native North Americans. It consists of a framework of arched poles covered by brush, bark, rushes, or mats. The wickiup is found among Native Americans in Arizona, New Mexico, Utah, Idaho, and California. Sometimes other dwellings of tribes in this region are called wickiups even when made of more permanent materials. The name is also spelled wickiup.

**Wild and Scenic River System** – A national system of rivers or river segments that have been designated by Congress and the President as part of the National Wild and Scenic Rivers System (Public Law 90-542, 1968). Each designated river is classified as one of the following:

**Wild River** – A river or section of a river free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. Designated wild as part of the National Wild and Scenic Rivers System.

**Scenic River** – A river or section of a river free of impoundments, with shorelines or watersheds still largely primitive and undeveloped but accessible in places by roads. Designated scenic as part of the National Wild and Scenic Rivers System.

**Recreational River** – A river or section of a river that is readily accessible by road or railroad, may have some development along its shorelines, and may have undergone some impoundment or diversion in the past. Designated as recreational as part of the National Wild and Scenic Rivers System.

**Wilderness** – An area of undeveloped federal land retaining its primeval character and influence, without permanent improvement or human habitation, that is protected and managed so as to preserve its natural conditions and that (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least 5,000 acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Wilderness Study Area (WSA)** – A roadless area that has been inventoried and found to be wilderness in character, has few human developments, and provides outstanding opportunities for solitude and primitive recreation, as described in Section 603 of the Federal Land Policy and Management Act of 1976 and in Section 2(c) of the Wilderness Act of 1964.

**Wilderness Values** – Values established in the Wilderness Act, such as solitude and naturalness.

**Wildfire** – Any unwanted wildland fire.

**Wild Horses and Burros** – Animals that are the subject of the Wild Free-Roaming Horse and Burro Act of 1971 (PL 92-195) and defined as “all unbranded and unclaimed horses and burros on public lands of the United States.”

## GLOSSARY

**Wildland Fire** – Any non-structure fire that occurs in the wild. Three distinct types of wildland fire have been defined and include wildfire, wildland fire use, and prescribed fire.

**Wildfire** – An unplanned and unwanted wildland fire, including unauthorized human-caused fires, escaped wildland fire use events, escaped prescribed fire projects, and all other wildland fires where the objective is to put the fire out.

**Wildland Fire Use** – The application of the appropriate management response to naturally ignited wildland fires to meet specific resource management objectives in predefined designated areas outlined in fire management plans.

**Prescribed Fire** – Any fire ignited by management actions to meet specific objectives.

**Wildland Fire Situation Analysis** – A decisionmaking process in which the agency administrator or representative does the following:

- describes the situation (fire),
- establishes objectives and constraints for managing the fire,
- compares multiple strategic wildland fire management alternatives,
- evaluates the expected effects of the alternatives,
- selects the preferred alternative, and
- documents the decision.

The format and level of detail required depend on the incident and its complexity. The key is to document the decision.

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

**Wildlings**– Young seedlings that develop naturally in the wild and are sometimes transplanted

**Wind-Scoured Areas** – Areas, generally in interstitial spaces, where the finer soil particles have blown away, sometimes leaving residual gravel, rock, or exposed roots on the soil surface.

**Withdrawal** – An action that restricts the use of public lands by removing them from the operation of some or all of the public land or mining laws.

**Woodland** – A forest community occupied mainly by uncommercial species such as juniper, mountain mahogany, and aspen.

**Yield** – Total forest growth over a specified period of time, less mortality, unmarketable fiber, and cull.

**Zeolites** – Hydrated sodium alumina silicates, either naturally-occurring (mined) or synthetically manufactured, with ion exchange properties. Zeolites were formerly used extensively for residential and commercial water softening, but have been largely replaced by synthetic organic cation resin ion exchangers.

**Zone of Saturation** – Underground region within which all openings are filled with water. The top of the zone of saturation is called the water table. The water within the zone of saturation is called groundwater.