

Glossary

ABIOTIC - The nonliving, material (as opposed to conceptual) components of the environment, such as air, rocks, soil, water, coal, peat, and plant litter. See **BIOTIC**.

ACCELERATED SOIL EROSION - Soil loss above natural levels resulting directly from human activities. Because of the slow rate of soil formation, accelerated erosion can permanently reduce plant productivity.

ACQUIRED PUBLIC LANDS - Lands in Federal ownership that the Government obtained as a gift or by purchase, exchange, or condemnation. See **PUBLIC LANDS**.

ACRE-FOOT - A volume that covers an area of 1 acre to a depth of 1 foot (43,560 ft³).

ACTIVE MANAGEMENT AREAS - Five areas in Arizona (i.e. Prescott, Phoenix, Pinal, Santa Cruz, and Tucson) where the Arizona Department of Water Resources regulates groundwater use. Groundwater regulations stem from the 1980 Arizona Groundwater Management Code, which provides the management framework to ensure dependable water supplies for Arizona well into the future. Ensuring dependable supplies, the code places conservation requirements on municipal and agricultural water use and promotes the use of renewable supplies, such as Colorado River water delivered by the Central Arizona Project.

ACTIVE MINING CLAIM - A parcel of Federal land, valuable for a mineral deposit or deposits. A claim is a parcel for which one has asserted a right of possession. The right is restricted to extracting and developing a mineral deposit. The rights granted by a mining claim are valid against a challenge by the United States and other claimants only after the discovery of a valuable mineral deposit. There are two types of mining claims: lode and placer.

Since October 5, 1992, only claimants who have a legal interest in ten or fewer mining claims nationwide and who also meet other requirements, may perform assessment work and file evidence of assessment. All other claimants must pay an annual fee of \$125 per claim to BLM or file for a waiver from payment by August 31. Failure to file by August 31 requires BLM to declare the claim or site null and void by operation of law.

ACTIVITY PLAN - A detailed and specific plan for managing a single resource program or plan element undertaken, as needed, to implement the more general resource management plan (RMP) decisions. BLM prepares activity plans for specific areas to reach specific resource management objectives within stated timeframes.

ADMINISTRATIVE USE OF MINERAL MATERIALS - BLM's use of mineral materials from public land for land management projects.

ADVANCED ECOLOGICAL STATUS - A condition that is considered to be achieved when the vegetation community at a defined ecological site has a high correlation to the potential natural community for that site (i.e. ecological site rating > 50). These conditions are determined from ecological site inventories using the Natural Resource Conservation Service ecological site guides to compare the existing vegetation communities on each ecological site to the potential plant community for that site. Achieving an advanced ecological status is assumed to be an expression of the physical and biological condition or degree of function needed to sustain a healthy rangeland ecosystem.

AGGREGATE - Any combination of sand, gravel, and crushed stone in its natural or processed state.

AIR QUALITY RATING - See **CLASS I AIR QUALITY RATING** and **CLASS II AIR QUALITY RATING**.

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

ALLOTMENT - An area of one or more pastures where one or more operators graze their livestock. An allotment generally consists of Federal rangelands, but may include intermingled parcels of private, State, or Federal lands. BLM stipulates the number of livestock and season of use for each allotment.

ALLOTMENT MANAGEMENT PLAN (AMP) - A livestock grazing management plan for a specific unit of rangeland and based on multiple use resource management objectives. The AMP considers livestock grazing in relation to other uses of rangelands and to renewable resources--watershed, vegetation, and wildlife. An AMP establishes the seasons of use, number of livestock to be permitted on rangelands, and the range improvements needed.

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.

ALLUVIUM - Any sediment deposited by flowing water as in a riverbed, floodplain, or delta.

ANALYSIS OF THE MANAGEMENT SITUATION (AMS) - Step 4 in BLM's resource management planning process. An MSA 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 upon an average daily 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 a month.

ANNUAL PLANT - A plant that completes its life cycle and dies in 1 year or less. Also see **PERENNIAL PLANT**.

APPROPRIATE MANAGEMENT LEVEL (AML) - In wild horse and burro management, a single number that is the high point of an established population range to maintain a thriving natural ecological balance, based on available forage, water, and other resource needs or conflicts.

AQUATIC HABITATS - Habitats confined to streams, rivers, springs, lakes, ponds, reservoirs, and other water bodies.

AQUIFER - A water-bearing bed or layer of permeable rock, sand, or gravel capable of yielding large amounts of water.

AQUIFER RECHARGE - Adding water to an aquifer, a process that occurs naturally from the infiltration of rainfall and from water flowing over earth materials that allow it to infiltrate below the land surface.

ARCHAEOLOGICAL FEATURE - A nonportable object, not recoverable from its matrix (usually in an archeological site) without destroying its integrity. Examples are rock paintings, hearths, post holes, floors, and walls.

AREA OF CRITICAL ENVIRONMENTAL CONCERN

(ACEC) - A designated area on public lands where special management attention is required- (1) to protect and prevent irreparable damage to fish and wildlife; (2) to protect important historic, cultural, or scenic values, or other natural systems or processes; or (3) to protect life and safety from natural hazards.

ARIZONA STANDARDS FOR RANGELAND HEALTH AND GUIDELINES FOR GRAZING ADMINISTRATION - Standards and guidelines developed collaboratively by BLM and the Arizona Resource Advisory Council (RAC) to address the minimum requirements of the Department of the Interior's final rule for Grazing Administration, effective Aug. 21, 1995.

ASPECT- See **VISUAL ASPECT**.

AZSITE DATABASE - A computer database containing cultural site information managed by the State Historic Preservation Office and maintained by Northern Arizona University and Arizona State University.

BACK COUNTRY BYWAY - A component of the national scenic byway system which focuses primarily on corridors along back country roads which have high scenic, historic, archeological, or other public interest values. The road may vary from a single track bike trail to a low speed, paved road that traverses back country areas. (BLM Handbook H-8357-1, B 2)

BACK COUNTRY ZONE - Areas with undeveloped, primitive, and self-directed visitor experience without provisions for motorized or mechanized access, except for designated routes. Also see **FRONT COUNTRY ZONE** and **PASSAGE ZONE**.

BAJADA - A broad continuous slope extending along and from the base of a mountain range and formed by coalescing alluvial fans.

BAR - A ridge-like accumulation of sand, gravel, or other alluvial material formed in the channel, along the banks, or at the mouth of a stream where a decrease in velocity induces deposition. Also see **WATER BAR**.

BASAL DIAMETER - Diameter of a tree stem as measured 0.5 feet above the ground.

BASE FLOW (DISCHARGE) - 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 HERD - The constant livestock herd size that is continually licensed but may not be the same as the grazing (carrying) capacity. Also see **GRAZING CAPACITY**.

BASE LEVEL - The lowest level to which a land surface can be reduced by the action of running water.

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 (INTERMONTANE BASIN) - A broad structural lowland between mountain ranges, commonly elongated and many miles across.

BIOLOGICAL ASSESSMENT- Information prepared by or under the direction of a Federal agency to determine whether a proposed action is likely to (1) harm threatened or endangered species or designated critical habitat, (2) jeopardize the existence of species that are proposed for listing, or (3) adversely modify proposed critical habitat. Biological assessments must be prepared for major construction activities. The outcome of a biological assessment determines whether formal Section 7 consultation or a conference is needed. Also see **BIOLOGICAL EVALUATION**.

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.

BIOLOGICAL EVALUATION - The gathering and evaluation of information on proposed endangered and threatened species and critical and proposed critical habitat for actions that do not require a biological assessment. Also see **BIOLOGICAL ASSESSMENT**.

BIOLOGICAL OPINION - A document that includes the following- (1) 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, (2) a summary of the information on which the opinion is based, and (3) a detailed discussion of the effects of the action on listed species or designated critical habitat.

BIOLOGICAL VEGETATION

TREATMENT - Methods of vegetation treatment that employ living organisms to selectively suppress, inhibit, or control herbaceous and woody vegetation. Examples of such methods include insects; pathogens; and grazing by cattle, sheep, or goats.

BIOMASS - The total amount of living matter in a given unit of the environment.

BIOTIC - Pertaining to life or living; the living components of the environment. Also see **ABIOTIC**.

BIRDS OF CONSERVATION

CONCERN - As listed by the U.S. Fish and Wildlife Service, birds (other than threatened or endangered species) that are in greatest need of conservation action and without such action might become listed as threatened or endangered.

BLM SENSITIVE SPECIES - See **SENSITIVE SPECIES**.

BOSQUE - A woodland dominated by trees more than 15 feet tall.

BRAIDING - A pattern of an interlacing or tangled network of several branching and reuniting stream channels separated by branch islands or channel bars.

BROWSE - The part of leaf and twig growth of shrubs, woody vines, and trees available for animal consumption.

BURNBLOCK - In prescribed burning, an area having uniform enough conditions of stand and fuel to be treated uniformly under a given burning prescription. The size of burnblocks ranges from the smallest that allows an economically acceptable cost per acre, up to the largest that can conveniently be treated in one burning period.

BURN OUT - Setting fire inside a control line to widen it or consume fuel between the edge of the fire and the control line.

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 and endangered species.

CANOPY - The cover or leaves of branches formed by the tops or crowns of plants as viewed from above the cover measured by the vertical projection downward of the extent of the cover and expressed as a percentage of the ground so covered.

CARBON-14 DATING - A method of estimating the age of an artifact containing carbon by measuring the radioactivity of its carbon-14 content to determine how long ago the specimen was separated from equilibrium with the atmosphere/plant/animal cycle. Continuously produced in the atmosphere by cosmic ray bombardment, carbon-14 decays with a half-life typically described as 5,568 years. An object is dated by comparing its carbon-14 activity per unit mass with that in a contemporary sample.

CARRYING CAPACITY

(RECREATION) - The amount of recreation use a given resource can sustain before the resource's quality begins to irreversibly deteriorate.

CARRYING CAPACITY (WILDLIFE) -

The most animals a specific habitat or area can support without causing deterioration or degradation of that habitat. Also see **GRAZING CAPACITY**.

CASUAL USE (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, non-motorized 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.

If the use goes beyond those conditions, the activity should be treated as any other organized recreational group or competitive activity or event for which BLM would require the event organizer to obtain a special recreation permit (SRP).

CASUAL USE OF MINERAL

MATERIALS - Extracting mineral materials for limited personal (noncommercial) uses.

CATEGORICAL EXCLUSION - A

category of Federal actions that do not individually or cumulatively have a significant effect on the human environment and for which an environmental impact statement or an environment assessment is required.

CATTLE GUARD - A device placed in a road, usually a grate or series of metal bars placed perpendicular to the flow of traffic, which allows free passage of vehicles but which livestock will not cross.

CATTLE YEAR-LONG (CYL) - The amount of forage needed to sustain one cow for a 1-year period. One CYL equals 12 animal unit months (AUMs). Also see **ANIMAL UNIT MONTH**.

CHANNEL - A natural or artificial watercourse with a definite bed and banks to confine and conduct continuously or periodically flowing water.

CHANNELIZATION - The process of rebuilding the natural course of a stream to make it flow into a restricted path.

CHANNEL MORPHOLOGY - The structure and form of a stream channel.

CHEMICAL VEGETATION

TREATMENTS - The applying of chemicals to control unwanted vegetation.

CLASS I AIR QUALITY RATING -

Under the Clean Air Act, the rating given areas of the country selected to receive the most stringent degree of air quality protection. Also see **CLASS II AIR QUALITY RATING**.

CLASS II AIR QUALITY RATING -

Under the Clean Air Act, the rating given areas of the country selected for somewhat less stringent protection from air pollution damage than Class I areas, except in specified cases. Also see **CLASS I AIR QUALITY RATING**.

CLIMAX - A plant community's final and highest ecological development, which emerges after a series of successive vegetational stages. The climax community perpetuates itself indefinitely unless disturbed by outside forces. Also see **DISCLIMAX**.

COLLUVIUM - Any loose, heterogeneous and incoherent mass of soil and/or rock fragments moved downslope by gravity-driven processes (like creep or sheet wash) and deposited at the base of the slope or hillside.

COLONIZATION - Occupation of an area by a group of organisms that previously did not occupy the area.

COMMUNITY - A collective term used to describe an assemblage of organisms living together; an association of living organisms having mutual relationships among themselves and with their environment and thus functioning at least to some degree as an ecological unit.

COMPETITIVE RACES - For purposes of this plan, all competitive events that have an element of speed as a component, including, motorcycle enduros, OHV desert racing, and equestrian endurance rides.

CONSERVATION EASEMENT - An easement to assure the permanent preservation of land in its natural state or in whatever degree of naturalness the land has when the easement is granted. Also see **EASEMENT**.

COMMUNITY RESOURCE UNIT (CRU) - In social ecology, a subdivision of a human resource unit that shows the "catchment area" of a community, or its zone of influence, beyond which people relate to another community. Geographic features or settlement patterns often determine these boundaries. People in CRUs experience great face-to-face knowledge, and the caretaking systems through informal networks are the strongest. Also see **HUMAN RESOURCE UNIT (HRU)**.

CONSERVATION EASEMENT- An easement to assure the permanent preservation of land in its natural state or in whatever degree of naturalness the land has when the easement is granted. Also see **EASEMENT**.

COOL-SEASON PLANTS - Plants whose major growth occurs during the late fall, winter, and early spring. Also see **WARM-SEASON PLANTS**.

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 RECREATION MANAGEMENT AREA (CRMA) - An area for which BLM enters into a cooperative management agreement with a local government to manage recreation land.

CORRIDOR- See **DESIGNATED CORRIDOR**.

COVER - (1) Plants or plant parts, living or dead, on the surface of the ground; (2) plants or objects used by wild animals for nesting, rearing of young, escape from predators, or protection from harmful environmental conditions.

COW-CALF LIVESTOCK OPERATION - A livestock operation that maintains a base breeding herd of mother cows and bulls. The cows produce a calf crop each year, and the operation keeps some heifer calves from each calf crop for breeding replacements. Between the ages of 6 and 12 months, the operation sells the rest of the calf crop along with old and nonproductive cows and bulls.

CREEPING PLANT - A plant that spreads over the ground or other surface.

CRETACEOUS - In geologic history the third and final period of the Mesozoic era, from 144 million to 65 million years ago, during which extensive marine chalk beds formed.

CRITERIA AIR POLLUTANTS - Air pollutants for which acceptable levels of exposure can be determined and for which an ambient air quality standard has been set. Examples of such pollutants are ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and PM₁₀ and PM_{2.5}.

CRITERIA POLLUTANTS - See **CRITERIA AIR POLLUTANTS**.

CRITICAL HABITAT, DESIGNATED - Specific parts of an area (1) that are occupied by a federally listed threatened or endangered plant or animal at the time it is listed and (2) that contain physical or biological features essential to the conservation of the species or that may require special management or protection. Critical habitat may also include specific areas outside an area occupied by a federally listed species if the Secretary of the Interior determines that these areas are essential for conserving the species.

CROSSING LANE - A fenced corridor that allows livestock to cross a stream without spreading out into the water.

CULTURAL HERITAGE VALUES - The irreplaceable qualities that are embodied in cultural resources, such as scientific information about prehistory and history, cultural significance to Native Americans and other groups, and the potential to enhance public education and enjoyment of the Nation's rich cultural heritage. Section 1 of the National Historic Preservation Act states that "the preservation of this irreplaceable heritage is in the public interest so that its vital legacy of cultural, educational, aesthetic, inspirational, economic and energy benefits will be maintained and enriched for future generations of Americans."

CULTURAL RESOURCE - A location of human activity, occupation, or use identifiable through field inventory, historical documentation, or oral evidence. Cultural resources include archaeological and historical sites, structures, buildings, objects, artifacts, works of art, architecture, and natural features that were important in past human events. They may consist of physical remains or areas where significant human events occurred, even though evidence of the events no longer remains. And they may include definite locations of traditional, cultural, or religious importance to specified social or cultural groups.

CULTURAL RESOURCE DATA - Cultural resource information embodied in material remains such as artifacts, features, organic materials, and other remnants of past activities. An important aspect of data is context, a concept that refers to the relationships among these types of materials and the situations in which they are found.

CULTURAL RESOURCE DATA RECOVERY - The professional application of scientific techniques of controlled observation, collection, excavation, and/or removal of physical remains, including analysis, interpretation, explanation, and preservation of recovered remains and associated records in an appropriate curatorial facility used as a means of protection. Data recovery may sometimes employ professional collection of such data as oral histories, genealogies, folklore, and related information to portray the social significance of the affected resources. Such data recovery is sometimes used as a measure to mitigate the adverse impacts of a ground-disturbing project or activity.

CULTURAL RESOURCE INTEGRITY - The condition of a cultural property, its capacity to yield scientific data, and its ability to convey its historical significance. Integrity may reflect the authenticity of a property's historic identity, evidenced by the survival or physical characteristics that existed during its historic or

prehistoric period, or its expression of the aesthetic or historic sense of a particular period of time.

CULTURAL RESOURCE INVENTORY (SURVEY) - A descriptive listing and documentation, including photographs and maps of cultural resources. 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.

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 PROJECT PLAN - For cultural resource projects, a

detailed design plan that defines the procedures, budget, and schedule for such activities as structure stabilization, recordation, interpretive development, and construction of facilities such as trails. These plans include estimates on workforce, equipment, and supply needs.

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 - (40 CFR 1508.8) "...is the impact 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. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

DATA RECOVERY - See **CULTURAL RESOURCE DATA RECOVERY**.

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**.

DEFERRED ROTATION GRAZING - Moving grazing animals to various parts of a range in succeeding years or seasons to provide for seed production, plant vigor, and seedling growth.

DESERT TORTOISE HABITAT CLASSIFICATIONS - Three categories of desert tortoise habitat based on population, viability, size, density, and manageability and

derived from BLM inventories of desert tortoise habitat throughout the planning areas between 1989 and 1999. The categories are as follows-

Category I: Medium to high tortoise density. Habitat area essential for maintaining large, viable populations.

Category II: Low to moderate tortoise density. Habitat is manageable.

Category III: Isolated patches of good habitat exist but are difficult to manage. Most management conflicts are not resolvable.

DESIGNATED CORRIDOR - BLM's preferred route for placing rights-of-way for utilities (i.e. pipelines and powerlines) and transportation (i.e. highways and railroads).

DESIRED PLANT COMMUNITY - The plant community that has been determined through a land use or management plan to best meets the plan's objectives for a site. A real, documented plant community that embodies the resource attributes needed for the present or potential use of an area, the desired plant community is consistent with the site's capability to produce the required resource attributes through natural succession, management intervention, or a combination of both.

DETRITAL COVER - Cover that consists of dead organic matter.

DETRITUS - Disintegrated matter, such as rock fragments or organic debris accumulated in pond water, mud, or soil.

DIKE - An upright or steeply dipping sheet of igneous rock that has solidified in a crack or fissure in the earth's crust; a human-made structure used to control stream flow.

DISCLIMAX - An enduring climax community altered by human or livestock disturbance, such as grassland that has replaced a deciduous forest. Also see **CLIMAX**.

DISPERSED RECREATION- Recreation that does not require developed sites or facilities.

DISTURBANCE REGIME- The regular pattern of occurrence or characteristic behavior of disturbance that includes type, intensity, frequency, and spatial extent.

DIVISION FENCE - A fence that separates pastures or allotments.

DRAW - A natural drainage basin or gully.

EASEMENT- The right to use land in a certain way granted by a landowner to a second party. Also see **CONSERVATION EASEMENT**.

ECOLOGICAL CONDITION - See **ECOLOGICAL SITE RATING**.

ECOLOGICAL INTEGRITY- The quality of a natural unmanaged or managed ecosystem in which the natural ecological processes are sustained, with genetic, species, and ecosystem diversity assured for the future.

ECOLOGICAL NICHE- See **NICHE**.

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 DESCRIPTIONS (RANGE SITE GUIDE) - Descriptions of the following characteristics of an ecological site- soils, physical features, climatic features, associated hydrologic features, plant communities possible on the site, plant community dynamics, annual production estimates and distribution of production throughout the year, associated animal communities, associated and similar sites, and interpretations for management.

ECOLOGICAL SITE INVENTORY - The basic inventory of present and potential vegetation on BLM rangeland.

ECOLOGICAL SITE RATING (ECOLOGICAL CONDITION/ ECOLOGICAL STATUS) - The present state of vegetation of an ecological site in relation to the potential natural community for the site. Independent of the site's use, the ecological site rating is an expression of the relative degree to which the kinds, proportions, and amounts of plants in a community resemble those of the potential natural community. The four ecological status classes correspond to 0-25 percent, 25-50 percent, 51-75 percent, or 76-100 percent similarity to the potential natural community and are called early-seral, mid-seral, late-seral, and potential natural community, respectively.

ECOSYSTEM - Organisms, together with their abiotic environment, forming an interacting system and inhabiting an identifiable space.

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.

ELIGIBLE RIVER SEGMENT - Qualification of a river for inclusion in the National Wild and Scenic Rivers System by determining that it is free flowing and, with its adjacent land area, has at least one river-related value considered to be outstandingly remarkable.

EMERGENT VEGETATION - Aquatic plant species that are rooted in wetlands but extend above the water's surface. Also see **SUBMERGENT VEGETATION**.

ENDANGERED SPECIES - Any animal or plant species in danger of extinction throughout

all or a significant portion of its range as designated by the U.S. Fish and Wildlife Service under the Endangered Species Act. Also see **THREATENED SPECIES**.

ENDURO - An off-road competition against the clock and usually over long distances.

ENERGY FLOW - The intake, conversion, and passage of energy through organisms or through an ecosystem.

ENTRENCHMENT - The process by which a stream erodes downward (incision) creating vertical, often eroding banks and abandoning its floodplain. Entrenched streams are often referred to as gullies.

ENVIRONMENTAL ASSESSMENT (EA - (40 CFR 1508.9)

"(a) Means a concise public document for which a Federal agency is responsible that serves to-

1. Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.
2. Aid an agency's compliance with the Act when no environmental impact statement is necessary.
3. Facilitate preparation of a statement when one is necessary.

(b) Shall include brief discussions of the need for the proposal, of alternatives as required by section 102 (2) (E), of the environmental impacts of the proposed action and Alternatives, and a listing of agencies and persons consulted." Also see **ENVIRONMENTAL IMPACT STATEMENT**.

ENVIRONMENTAL IMPACT STATEMENT (EIS) - (40 CFR 1508.11)

"...means a detailed written statement as required by section 102 (2) (C) of the Act"

(referring to the National Environmental Policy Act.) Also see **ENVIRONMENTAL ASSESSMENT**.

ENVIRONMENTAL JUSTICE (EJ) - Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," directs Federal agencies to assess whether their actions have disproportionately high and adverse human health or environmental effects on minority or low-income populations.

EPHEMERAL FORAGE - Part-time or seasonal forage; forage produced by annual forage species.

EPHEMERAL STREAM - A stream or portion of a stream that (1) flows only in direct response to precipitation, (2) receives little or no water from springs or no long continued supply from snow or other sources, and (3) has a channel that is always above the water table.

ETHNOECOLOGY - The study of the relationship between a society and its natural environment, including the spatio-temporal organization of human activities and how nature and natural resources are used (i.e. hunting, fishing, collecting, farming, preparing food); the study of how people perceive and manipulate their environments.

EVAPORITES - Sedimentary rocks formed by the precipitation of salts in hot dry regions from shallow seas or lakes.

EXCAVATION - The scientific examination of an archaeological site through layer-by-layer removal and study of the contents within prescribed surface units, e.g. square meters.

EXCLOSURE - An area fenced to exclude animals.

EXOTIC - An organism or species that is not native to the region in which it is found.

EXTENSIVE RECREATION MANAGEMENT AREA (ERMA) - A blanket RMP allocation for recreation use made in a resource management plan for all BLM's land covered by the plan but not otherwise allocated in special recreation management areas or recreation management zones.

EXTIRPATED SPECIES - A locally extinct species; a species that is no longer found in a locality but exists elsewhere.

EXTIRPATION - See **EXTIRPATED SPECIES**.

FACILITY FOOTPRINT - The area on the ground defining or delineating the extent of the facility. For a building, it could be the outside edge of the foundation. For a parking lot, staging area, or trail head, it could be a barrier fence or artificial boundary that defines the limits of the particular use.

FAULT BLOCK MOUNTAINS (BLOCK MOUNTAINS) - Mountains formed by block faulting which divides the earth's crust into fault blocks of different elevations and orientations.

FEDERAL LAND POLICY AND MANAGEMENT ACT (FLPMA) - The act that- (1) set out, for the Bureau of Land Management, 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.

FEE SIMPLE TITLE - Unrestricted ownership of real property (i.e. land and whatever is erected or growing on it).

FINDING OF NO SIGNIFICANT IMPACT (FONSI) - A document that is prepared by a federal agency and that briefly explains why an action not otherwise excluded from the requirement to prepare an environmental impact statement (EIS) would not significantly affect the human environment and not require an EIS.

FINE PARTICULATE MATTER (PM_{2.5}) - Particulate matter that is less than 2.5 microns in diameter. Also see **PARTICULATE MATTER** and **INHALABLE PARTICULATE MATTER**.

FIRE INTENSITY - The rate of heat release for an entire fire at a specific time.

FIRE MANAGEMENT - The integration of fire protection, prescribed burning, and fire ecology knowledge into multiple use planning, decision making, and land management.

FIRE MANAGEMENT PLAN - A plan that defines a program to manage wildland and prescribed fires and documents the fire management program in the approved land use plan.

FIRE SUPPRESSION - All the work of extinguishing or confining a fire, beginning with its discovery.

FIRE SUPPRESSION RESOURCES - People, equipment, services, and supplies available or potentially available for assignment to incidents.

FIXED STOCKING RATE - A stocking rate that is fixed and cannot vary from season to season or year to year. Also see **STOCKING RATE** and **VARIABLE STOCKING RATE**.

FLOODPLAIN - Nearly level land on either or both sides of a channel that is subject to overflow flooding.

FORAGE - All browse and herbage that is available and acceptable to grazing animals or that may be harvested for feed.

FORB - An herbaceous plant that is not a grass, sedge, or rush.

FREE USE PERMIT - A permit that allows the removal of timber or other resources from the public lands free of charge.

FRONT COUNTRY ZONE - Focal areas for motorized and non-motorized visitation, concentrating use along major access routes. Also see **BACK COUNTRY ZONE** and **PASSAGE ZONE**.

FUEL BED (IN FIRE SUPPRESSION) - The fuel composition in natural settings.

FUEL LOAD (IN FIRE SUPPRESSION) - 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 MOISTURE CONTENT (FUEL MOISTURE) (IN FIRE SUPPRESSION) - 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.

FUGITIVE DUST - Dust particles that are introduced into the air through certain actions such as soil cultivation or vehicles crossing open fields or driving on dirt roads or trails.

FUNCTIONING WATERS (WILDLIFE)

- A well, catchment, spring, reservoir, or other feature (human made or natural) that provides a reliable source of potable water on a year-long basis. For such a source of water to be considered functional, the quality and quantity of water must be sufficient to sustain native wildlife populations in the local area. For example, a reservoir that fills up during monsoon rains but goes dry in a few weeks is not functional from a wildlife standpoint.

FUNDAMENTALS OF RANGELAND

HEALTH - As Described in 43 CFR 4180, the conditions in which (1) rangelands are in proper functioning physical condition, (2) ecological process are supporting healthy biotic populations and communities, (3) water quality is meeting state standards and BLM objectives, and (4) special status species habitat is being restored or maintained.

GENERALIST - An organism that can survive under a wide variety of conditions and does not specialize to live under any particular set of circumstances.

GENETIC DIVERSITY - The variation in genes in a population pool that contributes to the ability of organisms to evolve and adapt to new conditions.

GRAZING CAPACITY (CARRYING CAPACITY) - The highest livestock stocking rate possible without damaging vegetation or related resources. Grazing capacity may vary from year to year or in the same area because of fluctuating forage production.

GRAZING CYCLE - The amount of time required for livestock to rotate completely through all the pastures under an allotment management plan.

GRAZING PERMIT/LICENSE/LEASE - Official written permission to graze a specific number, kind, and class of livestock for a specified period on a defined rangeland.

GRAZING PRIVILEGES - The use of public land for livestock grazing under permits or leases.

GRAZING REST - Any period during which no livestock grazing is allowed within an area.

GRAZING SEASON - An established period for which grazing permits are issued.

GRAZING SYSTEM - A systematic sequence of grazing use and nonuse of an allotment to meet multiple use goals by improving the quality and amount of vegetation.

GROUND COVER - See **COVER**.

GROUND LITTER - See **LITTER**.

GROUNDWATER - Subsurface water and underground streams that supply wells and springs. Use of groundwater in Arizona does not require a water right, but must only be "reasonable." Groundwater is separated from surface water by the type of alluvium in which the water is found. Water in the younger, floodplain alluvium is considered surface water. Water in the older, basin-fill alluvium is considered groundwater.

HABITAT - An area that provides an animal or plant with adequate food, water, shelter, and living space.

HABITAT FRAGMENTATION - Process by which habitats are increasingly subdivided into smaller units resulting in their increased insularity and losses of total habitat area.

HABITAT MANAGEMENT PLAN - A site-specific wildlife habitat plan.

HALF-SHRUB - A perennial plant with a woody base whose annually produced stems die each year.

HAZARDOUS MATERIALS

(HAZMAT) - An all-encompassing term that includes hazardous substances; hazardous waste; hazardous chemical substances; toxic substances; pollutants and contaminants; and imminently hazardous chemical substances and mixtures that can pose an unreasonable risk to human health, safety, and property.

HEAP LEACHING - A low-cost technique for extracting metals from ore by percolating leaching solutions through heaps of ore placed on impervious pads. This method is generally used on low-grade ores.

HERBACEOUS - Of, relating to, or having the characteristics of a vascular plant that does not develop woody tissue.

HERD AREA (HA) - A geographic area occupied by a wild horse or burro herd and its habitat in 1971.

HERD MANAGEMENT AREA (HMA) - An area established for maintaining wild horse and burro herds.

HISTORICAL SITE - A location that was used or occupied after the arrival of Europeans in North America (ca. A.D. 1492). Such sites may consist of physical remains at archaeological sites or areas where significant human events occurred, even though evidence of the events no longer remains. They may have been used by people of either European or Native American descent.

HOHOKAM - A group of North American Indians who lived between perhaps 300 BC and AD 1400 in central and southern Arizona, largely along the Gila and Salt Rivers.

HOLDING AREA (HOLDING GROUND) - An area where livestock are often held during roundups.

HOME RANGE - The area in which an animal travels in the scope of natural activities.

HUMAN RESOURCE UNIT (HRU) - An area that is roughly equivalent in size to a county but seldom corresponds to county boundaries. HRU boundaries are derived from the cultural descriptors listed below and by self-reporting by residents living in these areas.

- HRUs are characterized by frequent and customary interaction.
- HRUs reveal face-to-face human society where people could be expected to have personal knowledge of each other and where informal caretaking systems are the strongest.
- People's daily activities occur mainly within their HRU, including work, school, shopping, social activities, and recreation.
- Health, education, welfare, and other public services are highly organized at this level, with a town or community almost always as its focal point.
- An HRU is characterized by a sense of place, a sense of identity with the land and the people, a sense of a common understanding of how the resources of their HRU should be managed, and a common understanding of how things are normally done at this territorial level.
- The regularity of interaction within an HRU reinforces a recognition and identification by the residents of natural and human-made features as "home."
- Because of this familiarity, boundaries between HRUs are clearly defined in the minds of those living within them.

Also see **COMMUNITY RESOURCE UNIT (CRU)**.

HYDRIC- Characterized by, relating to, or requiring an abundance of moisture.

HYDROLOGIC CYCLE - The circuit of water movement from the atmosphere to the earth and its return to the atmosphere through various stages or processes, such as precipitation, interception, runoff, infiltration, percolation, storage, evaporation, and transpiration.

IGNEOUS ROCK - Rock, such as granite and basalt, which has solidified from a molten or partially molten state.

INCIDENT - A human-caused or natural occurrence, such as wildland fire, that requires emergency action to prevent or reduce the loss of life or damage to property or natural resources.

INCIDENT COMMANDER - The person responsible for managing all operations in response to incidents (i.e. wildfires and other events requiring emergency action).

INDICATORS - Elements of the human environment affected, or potentially affected, by a change agent. An indicator can be a structural component, a functional process or an index. A key indicator integrates several system elements in such a way as to indicate the general health of that system.

INDUSTRIAL MINERALS - All minerals that humans extract from the earth's crust except for fuels, metallic ores, water and gemstones.

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.

INHALABLE PARTICULATE MATTER (PM₁₀) - Particulate matter in ambient air exceeding 10 microns in diameter.

Also see **PARTICULATE MATTER** and **FINE PARTICULATE MATTER**.

INHOLDING - 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 wildland fire to protect lives and property and prevent further extension of the fire.

INSTREAM WATER USE - Water use within a stream channel for such purposes as navigation, recreation, fish and wildlife preservation, water quality improvement, and hydroelectric power generation.

INSTREAM WATER RIGHT (INSTREAM FLOW WATER RIGHT) - A water right that reserves water for and protects such specific instream water uses as fish spawning and recreation. The instream water right allows water needed for these activities to be set aside and keeps later water users from appropriating water that may affect the instream activity. Also see **INSTREAM WATER USE**.

INTERMITTENT STREAM - A stream that generally flows during wet seasons, but is dry during dry seasons.

INVASIVE SPECIES (INVADERS) - Plant species that were either absent or present only in small amounts in undisturbed portions of a specific range site's original vegetation and invade following disturbance or continued overuse.

KEY FORAGE SPECIES - Forage species whose use serves as an indicator of the degree of use of associated species.

KEYSTONE SPECIES - Species that create a special habitat on which other species depend and without which some wildlife would become severely depleted. Two examples of key stone

species are beavers, which create ponds, and prairie dogs, which create burrows.

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.

LARAMIDE OROGENY- A series of mountain building events that affected much of western North America in Late Cretaceous and Early Tertiary periods. (The Cretaceous period ended 65 million years ago and was followed by the Tertiary period.)

LEACHATE - The liquid that has percolated through and dissolved minerals out of ore.

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.

LITTER - The uppermost layer of organic debris on the soil surface, essentially freshly fallen or slightly decomposed vegetal material.

LIVE FUEL MOISTURE- See **FUEL MOISTURE**.

LIVESTOCK TRESPASS- The unauthorized grazing of livestock.

LOAM - A soil texture class for soil material that contains 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand.

LOCATABLE MINERALS - Minerals that may be acquired under the Mining Law of 1872, as amended.

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.

MAINTENANCE (ROAD) - (From BLM 9100 Manual) The work required keeping a facility in such a condition that it may be continuously utilized at its original or designed capacity and efficiency, and for its intended purposes. Road or trail maintenance actions include (a) signage, (b) minor repairs, e.g. correction of drainage, erosion, or vegetation interference problems. Upon performance of condition assessment, maintenance could also be construed as (c) allowing road or trail to remain in present state for regular and continuous use.

MANAGE FOR WILDERNESS CHARACTERISTICS (MWC) AREAS - Areas that contain values such as outstanding opportunities for primitive and unconfined recreation or outstanding opportunities for solitude and a few human intrusions, where preservation of these values represents a major management focus.

MAJOR LAND RESOURCE AREAS (MLRAS) - Broad geographic areas that have a particular pattern of soils, climate, water resources, vegetation, and land use. Each MLRA in which range and forest land occur is further broken into range sites.

MAJOR RIGHTS-OF-WAY- Rights-of-way along which pass transmission lines (consisting of 115kV or higher) used to transmit large blocks of energy to load centers for distribution.

MANAGEMENT SITUATION

ANALYSIS (MSA) - See ANALYSIS OF THE MANAGEMENT SITUATION (AMS).

MANUAL VEGETATION

TREATMENTS - The use of hand-operated power tools and hand tools to cut, clear, or prune herbaceous and woody plants. In manual treatments, workers cut plants above ground level; pull, grub, or dig out plant root systems to prevent later sprouting and regrowth; scalp at ground level or remove competing plants around desired vegetation; or place mulch around desired vegetation to limit the growth of competing vegetation. Manual vegetation treatments cause less ground disturbance and generally remove less vegetation than prescribed fire or mechanical treatments.

MECHANICAL VEGETATION

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

MESOZOIC ERA - One of the great eras of geologic time (248 million to 65 million years ago), following the Paleozoic era, preceding the Cenozoic era, and including the Triassic, Jurassic, and Cretaceous periods.

MICROHABITAT - The smallest unit of a habitat, like a clump of grass or a space between rocks.

MINERAL ENTRY - The filing of a claim on public land to obtain the right to any minerals it may contain.

MINERALIZATION - Evidence of the presence of minerals.

MINERAL MATERIAL DISPOSAL - The disposal through sale or free use permit of sand,

gravel, decorative rock, or other materials defined in 43 CFR 3600.

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.

MINERALS PLANNING AREA - The area with federally administered minerals, where (1) the surface rights are held by BLM, the State of Arizona, or private parties, and located within the administrative boundaries of BLM's Phoenix Field Office but (2) are not being planned for in the Sonoran Desert National Monument RMP and Phoenix South RMP Revision.

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 PLAN OF OPERATIONS - A plan for mineral exploration and development that a mining operator must submit to BLM for approval for all mining, milling, and bulk sampling of more than 1,000 tons and for exploration disturbing more than 5 acres or on special status lands, including wilderness, areas of critical environmental concern, national monuments, national conservation areas, and lands containing proposed or listed threatened or endangered species or their critical habitat. A plan of operations must document in detail all actions that the operator plans to take from exploration through reclamation.

MONITORING - The collection of information to determine the effects of resource management and detect changing resource trends, needs, and conditions.

MOSAIC - A pattern of vegetation in which two or more kinds of communities are interspersed in patches.

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- A combination of balanced and diverse resource uses that considers long-term needs for renewable and nonrenewable resources including recreation, wildlife, rangeland, timber, minerals, and watershed protection, along with scenic, scientific, and cultural values.

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 (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 HISTORIC PRESERVATION ACT OF 1966, 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**.

NATIONAL HISTORIC TRAIL - One of the three categories of national trails defined in the National Trails System Act of 1968 that can only be established by act of Congress and are administered by Federal agencies, although part or all of their land base may be owned and managed by others. National historic trails are generally more than 100 miles long and follow as closely as possible and practicable the original trails or routes of travel of national historic significance. Their purpose is identifying and protecting the historic route and its remnants and artifacts for public use and enjoyment.

NATIONAL MONUMENT- An area designated to protect objects of scientific and historic interest by public proclamation of the President under the Antiquities Act of 1906, or by Congress for historic landmarks, historic and prehistoric structures, or other objects of historic or scientific interest on public lands. Designation also provides for the management of these features and values.

NATIONAL RECREATION TRAIL- One of the three categories of national trails defined in the National Trails System Act of 1968 that can only be established by act of Congress and are administered by federal

agencies, although part or all of their land base may be owned and managed by others. National recreational trails are existing regional and local trails recognized by either the Secretary of Agriculture or the Secretary of the Interior upon application.

NATIONAL REGISTER DISTRICT- A group of significant archaeological, historical, or architectural sites, within a defined geographic area, that is listed on the National Register of Historic Places. 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 REGISTER ELIGIBLE PROPERTIES - Cultural resource properties that meet the National Register criteria and have been determined eligible for nomination to the National Register of Historic Places because of their local, state, or national significance. Eligible properties generally are older than 50 years and have retained their integrity. They meet one or more of four criteria- (a) associated with events that have made a significant contribution to the broad patterns of our history; (b) associated with the lives of persons significant in our past; (c) embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master; and (d) have yielded, or may be likely to yield, information important in prehistory or history.

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 and that may have some development along their shorelines and may have undergone some impoundments or diversion in the past, (2) scenic—rivers or sections of rivers free of impoundments with shorelines or watersheds still largely undeveloped but accessible in places by roads, and (3) wild—rivers or sections of rivers free of impoundments and generally inaccessible except by trails with watersheds or shorelines essentially primitive and waters unpolluted.

NATIVE DIVERSITY- The diversity of species that have evolved in a given place without human influence.

NATIVE SPECIES- A species that is part of an area's original flora and fauna.

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

NEST PARASITISM (BROOD PARASITISM) - The exploitation by one bird species of the parental behavior of another species. A nest parasite lays eggs in the nest of another bird species to be cared for by a host. The parasite benefits from saving time, energy, and survival prospects, whereas the host may suffer partial or complete loss of its own current reproduction.

NICHE- The role of an organism in the environment, its activities and relationships to the biotic and abiotic environment.

NITROGEN OXIDES (OXIDES OF NITROGEN, NO_x) - A general term for compounds of nitric oxide (NO), nitrogen dioxide (NO₂), and other oxides of nitrogen. Nitrogen oxides are typically created during combustion and are major contributors to smog formation and acid deposition. NO₂ is a criteria air pollutant and may have many adverse health effects.

NONATTAINMENT AREA- An area in which the level of a criteria air pollutant is higher than the level allowed by the federal standards. A single area may have acceptable levels of one criteria air pollutant but unacceptable levels of one or more other criteria air pollutants. Therefore, an area can be both attainment and nonattainment at the same time.

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.

NOXIOUS WEED - the Federal Noxious Weed Act, 1974 (PL 930629) defines a noxious weed as, "any living stage (including seeds and reproductive parts) of a parasitic or other plant of a kind which is of foreign origin, is new to or not widely prevalent in the U.S., and can directly or indirectly injure crops, other useful plants, livestock, poultry or other interests of agriculture, including irrigation, navigation, fish and wildlife resources, or the public health."

NUTRIENT CYCLE- A general term for the movement of any particular life essential substance through the physical and biological environment. Essential nutrient cycles include those of carbon, nitrogen, oxygen, and water.

OBLIGATE- Essential, necessary, unable to exist in any other state, mode, or relationship.

OFF-HIGHWAY VEHICLE (OHV)- Any vehicle capable of or designed for travel on or immediately over land, water, or other natural terrain (deriving motive power from any source other than muscle.) OHVs exclude (1) any nonamphibious 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. (43 CFR 8340.0-5)

OFF-ROAD VEHICLE (ORV) - See **OFF-HIGHWAY VEHICLE (OHV)**.

OFFSET - A method used in the 1990 Clean Air Act to give companies that own or operate large sources in nonattainment areas flexibility in meeting overall pollution reduction requirements when changing production processes. If the operator or owner of the source wants to increase the release of a criteria air pollutant, an offset (reduction of a somewhat greater amount of the same pollutant) must be obtained either at the same plant or by buying offsets from another company.

OUTSTANDING NATURAL AREA (ONA) - ACECs which contain unusual natural characteristics and are managed primarily for educational and recreational purposes.

OVERBURDEN- All the earth and other materials that overlie a natural mineral deposit.

OVERSTORY- The portion of the trees in a forest stand forming the upper crown cover. Also see **UNDERSTORY**.

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.

PALEOZOIC ERA- An era of geologic time (600 million to 280 million years ago) between the Late Precambrian and the Mesozoic eras and comprising the Cambrian, Ordovician, Silurian, Devonian, Mississippian, Pennsylvanian, and Permian periods.

PANICULATE AGAVE- Certain agave species such as Palmer's agave (*Agave palmeri*) and Parry's agave (*Agave parryi*), whose flowers are arranged on the stalk in a pyramidal, loosely branched cluster (panicle). The nectar and pollen of paniculate agaves are consumed by the lesser long-nosed bat, a federally listed endangered species.

PASSAGE ZONE- Lands along secondary travel routes where visitor or other uses would not be directed or encouraged, but could be accommodated. Also see **BACK COUNTRY ZONE** and **FRONT COUNTRY ZONE**.

PATENT- The instrument by which the Federal Government conveys title to the public lands.

PAYMENTS IN LIEU OF TAXES (PILT) - Payments made to counties by BLM to mitigate losses because public lands cannot be taxed. BLM calculates the amount of payments using a formula based on population and the amount of Federal land in a particular local jurisdiction. These payments are in addition to Federal revenues transferred to local governments under other programs, such as income generated from timber harvests, mineral receipts, and the use of federal land for livestock grazing.

PARTICULATE MATTER- Fine liquid or solid particles suspended in the air and consisting of dust, smoke, mist, fumes, and compounds containing sulfur, nitrogen, and metals. Also see **FINE PARTICULATE MATTER** and **INHALABLE PARTICULATE MATTER**.

PASTURE- A grazing area that is separated from other areas by fencing or natural barriers.

PEDESTALLING- The removal of soil from the base of a plant, exposing the roots. Pedestalling is often a result of wind and streambank erosion.

PERFORMANCE- See **LIVESTOCK PERFORMANCE**.

PERENNIAL PLANT- A plant that has a life cycle of 3 or more years. Also see **ANNUAL PLANT**.

PERENNIAL STREAM- A stream that flows continuously during all seasons of the year.

PERMEABILITY, SOIL- The ease with which gases, liquids, or plant roots penetrate or pass through a bulk mass of soil or a layer of soil.

PERMITTEE- A person or company permitted to graze livestock on public land.

PERMIT TYPES AND DEFINITIONS-

Commercial Use- The activity, service, or use is commercial if-

- Any person, group, or organization makes or attempts to make a profit, receive money, amortize equipment, or obtain goods or services, as compensation from participants in recreational activities occurring on public lands led, sponsored, or organized by that person, group, or organization;
- Anyone collects a fee or receives other compensation that is not strictly a sharing of actual expenses, or exceeds actual expenses, incurred for the purposes of the activity, service, or use;

- There is paid public advertising to seek participants; or
- Participants pay for a duty of care or an expectation of safety.

Competitive Use- Any organized, sanctioned, or structured use, event, or activity on public land in which two or more contestants compete and either or both of the following elements apply-

- Participants register, enter, or complete an application for the event;
- A predetermined course or area is designated;

Or, one or more individuals contesting an established record such as for speed or endurance.

Organized Group Activity and Event Use- A structured, ordered, consolidated, or scheduled event on, or occupation of, public lands for the purpose of recreational use that is not commercial or competitive.

Vending- The sale of goods or services, not from a permanent structure, associated with recreation on the public lands or related waters, such as food, beverages, clothing, firewood, souvenirs, filming or photographs (video or still), or equipment repairs.

PERSONAL INCOME- The sum of wage and salary payments, other labor income, proprietors' income, rental income of persons, personal dividend and interest income, and transfer payments to persons, less personal contributions for social insurance.

PETROGLYPH - Pictures, symbols, or other art work pecked, carved, or incised on natural rock surfaces.

PILT- See **PAYMENTS IN LIEU OF TAXES.**

PIPING- See **SOIL PIPING.**

PITHOUSE- A type of house built partly underground by prehistoric people.

PLACER CLAIM- A mining claim located on surficial or bedded deposits, particularly for gold located in stream gravels.

PLAN OF OPERATIONS- See **MINING PLAN OF OPERATIONS.**

PLANT SUCCESSION- The process of vegetational development by which an area becomes successively occupied by different plant communities of higher ecological order.

PLANT VIGOR- The relative wellbeing and health of a plant as reflected by its ability to manufacture enough food for growth and maintenance.

PLEISTOCENE (ICE AGE)- An epoch in the Quaternary period of geologic history lasting from 1.8 million to 10,000 years ago. The Pleistocene was an epoch of multiple glaciation, during which continental glaciers covered nearly one fifth of the earth's land.

PM_{2.5} PARTICULATES- Tiny particles with an aerodynamic diameter of 2.5 microns or less. These particles penetrate most deeply into the lungs.

PM₁₀ PARTICULATES- A criteria air pollutant consisting of small particles with an aerodynamic diameter of 10 microns or less. Their size allows them to enter the air sacs deep within the lungs where they may be deposited in have adverse health effects. These particles include dust, soot, and other tiny bits of solid materials in the air.

POKER RUN- A noncompetitive off-highway vehicle ride where riders have a choice of two or more clearly marked loop courses and pass several checkpoints to the finish line. After finishing the course, participants will draw poker hands for cash or other prizes.

POOL- A portion of a stream that has reduced current velocity and often water deeper than surrounding areas and that is frequently usable by fish for resting and cover.

POPULATION- A group of interbreeding organisms of the same kind occupying a particular space; a group of individuals of a species living in a certain area.

PORPHYRY COPPER- A disseminated replacement deposit in which copper minerals occur as discrete grains and veinlets throughout a large volume of rock; a large-tonnage, low-grade copper deposit.

POTENTIAL NATURAL COMMUNITY (PNC)- 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 PNC is the vegetation community best adapted to fully use the resources of an ecological site.

PRESCRIBED FIRE (BURNING) - The planned applying 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.

PRIMARY ROAD- See **ROAD AND ROUTE TYPES**.

PRIME FARMLAND- As defined by the Farmland Protection Policy Act of 1981, land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion, as determined by the Secretary of Agriculture. Prime farmland includes land with the above characteristics, but is being used to

produce livestock and timber. It does not include land already in or committed to urban development or water storage. Also see **UNIQUE FARMLAND**.

PRIMITIVE RECREATION- Recreation that provides opportunities for isolation from the evidence of humans, a vastness of scale, feeling a part of the natural environment, having a high degree of challenge and risk, and using outdoor skills. Primitive recreation is characterized by meeting nature on its own terms, without comfort or convenience of facilities.

PROPER FUNCTIONING CONDITION (RIPARIAN-WETLAND AREAS) - The condition where- (1) enough vegetation, landform, or large woody debris is present to dissipate the stream energy of high water flows, thereby reducing erosion and improving water quality; (2) sediments are filtered, bedload is captured, and floodplains develop; (3) flood water retention and ground water recharge are improved, root masses that stabilize streambanks against cutting action develop, and diverse ponding and channel characteristics are created to provide the habitat and the water depth, duration, and temperature needed for fish production, waterfowl breeding, and other uses; and (4) greater biodiversity is supported.

PROSPECTIVELY VALUABLE FOR OIL AND GAS- Known or believed to contain oil and gas deposits that have, or at some time in the future, proven economic value.

PUBLIC DOMAIN LANDS- Lands that are part of the original public domain and have never left federal ownership and lands in federal ownership that were acquired in exchange for public domain lands or for timber on public domain lands.

PUBLIC LAND ORDER - An order effecting, modifying, or canceling a withdrawal or reservation. Such an order is issued by the Secretary of the Interior pursuant to powers of the President delegated to the Secretary by Executive Order No.9146 of April 24, 1943.

PUBLIC LANDS - As defined by Public Law 94-579 (Federal Land Policy and Management Act of 1976), lands and interest in land owned by the United States and administered by the Secretary of the Interior through BLM, regardless of how the United States acquired possession. In common usage, public lands may refer to all federal land no matter what agency manages it. Also see **ACQUIRED PUBLIC LANDS**.

PUBLIC USE LEVELS- Three sets of proposed management actions for the interpretive use of archaeological sites in the Agua Fria National Monument, varying in the intensity of development and number of facilities. Example actions for each of these levels can be found in the Cultural Resources discussion of the Management Common to the AFNM section of Chapter 2.

PUEBLO- A Spanish word meaning "town" or "village" and used to describe an Indian village of apartment-type building with one or more stories. Pueblos are built of adobe or stone and have flat roofs.

QUARTEARNARY PERIOD- The current period of geologic history and second period of the Cenozoic era, which is believed to have covered the last 2 million to 3 million years.

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 seedings; chemical, mechanical, and biological plant control;

prescribed burning; water spreaders; pitting; chiseling; and contour furrowing.

RANGELAND - A kind 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.

RANGELAND ECOLOGICAL 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.

RANGE SITE- See **ECOLOGICAL SITE**.

RANGE SITE GUIDE- See **ECOLOGICAL SITE DESCRIPTIONS**.

RAPTORS- Birds of prey.

REACH- A relatively homogeneous section of a stream having a repetitious sequence of physical characteristics and habitat types.

RECHARGE- See **AQUIFER RECHARGE**.

RECLAIMING OR RECLAIMED (ROUTE) - See **ROAD AND ROUTE 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**.

RECREATION AND PUBLIC PURPOSES ACT of 1926 (44 Stat. 741, as amended; 43 U.S.C. 869 et seq.) - An act of Congress that allows lease or acquisition of public land to be used for recreation or public purposes by local government entities (county or city governments) and nonprofit organizations.

RECREATION MANAGEMENT ZONES (RMZs) - Areas within special recreation management areas (SRMAs) with a particular recreation management focus or resource challenges. See **SPECIAL RECREATION MANAGEMENT AREAS**.

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 SETTINGS- Settings described in the recreation opportunity spectrum (ROS) inventory method. Descriptions of the settings follow-

Primitive:

Remoteness: An area designated by a line generally 3 miles from all open roads, railroads, and motorized trails

Evidence of Humans: Setting is essentially an unmodified natural environment. Evidence of humans would be unnoticed by an observer wandering through the area.

Evidence of trails is acceptable but should not exceed standard to carry expected use.

Structures are extremely rare.

Social: Usually less than six parties per day encountered on trails and less than three parties visible at campsites.

Managerial: Onsite regimentation is low with controls primarily offsite.

Semi-primitive Non-motorized:

Remoteness: An area designated by a line generally 1/2 mile from any road, railroad, or trail open to public motorized use. (The guideline for applying the 1/2 mile criterion is to use 1/2 mile except where topographic or physical features closer than 1/2 miles adequately screen out the sights and sounds of humans and make access more difficult and slower. For example, if a ridge is 1/4 mile from the road, use the ridge instead of the 1/2 mile.)

Any roads, railroads, or trails within the semi-primitive non-motorized areas will have the following characteristics:

- Closed to public motorized use, and
- Are reclaimed, or in the process of reclaiming (when reclaiming will harmonize with the natural appearing environment). Some examples are old logging roads, old railroad beds, old access routes to abandoned campsites, temporary roads, and gated roads that are used for occasional administrative access.

Evidence of Humans: Natural setting may have subtle modifications that would be noticed but not draw the attention of an observer wandering through the area.

Little or no evidence of primitive roads and the motorized use of trails and primitive roads.

Structures are rare and isolated.

Social: Usually 6-15 parties per day encountered on trails and six or fewer parties visible from campsite.

Managerial: Onsite regimentation and controls present but subtle.

Semi-Primitive Motorized:

Remoteness: An area designed by a line generally 1/2 mile from open better than primitive roads. (The guideline for applying the 1/2 mile criterion is to consistently use 1/2 mile where topographic or physical features closer than 1/2 mile adequately screen out the sights and sounds of humans, e.g. a ridge 1/4 mile from the road).

Contains open primitive roads that are not maintained for the use of standard passenger-type vehicles, normally OHVs and high-clearance vehicles, e.g. an old pickup with high clearance. These open roads are generally tracks, ruts, or rocky-rough surface and upgraded and not drained. The roadbeds and cuts are mostly vegetated with grass or native material unless they are too rocky for vegetation. The roads harmonize with the natural environment. Examples include old logging roads from before specified road years, old revegetated railroad beds, old access roads to abandoned home-sites, temporary logging roads that are revegetated, and low standard administrative roads (normally used for access to wildlife openings).

Evidence of Humans: Natural setting may have moderately dominant alterations but would not draw the attention of motorized observers on trails and primitive roads within the area. Any closed improved roads must be managed to revegetate and harmonize with the natural environment.

Strong evidence of primitive roads and the motorized use of trails and primitive roads.

Structures are rare and isolated.

Social: Low to moderate contact frequency.

Managerial: Onsite regimentation and controls present but subtle.

Roaded Natural:

Remoteness: No criteria.

Evidence of Humans: Natural setting may have modifications, which range from being easily noticed to strongly dominant to observers within the area. But from sensitive travel routes and use areas these alterations would remain unnoticed or visually subordinate.

There is strong evidence of designed roads, highways, or both.

Structures are generally scattered, remaining visually subordinate or unnoticed to the sensitive travel route observer. Structures may include utility corridors or microwave installations.

Social: Frequency of contact is- Moderate to high on roads; Low to Moderate on trails and away from roads.

Managerial: Onsite regimentation and controls are noticeable but harmonize with the natural environment.

Rural:

Remoteness: No criteria.

Evidence of Humans: Natural setting is culturally modified to the point that it is dominant to the sensitive travel route observer. This setting may include pastoral, agricultural, intensively managed wildland resource landscapes, or utility corridors. Pedestrian or other slow-moving observers are constantly within view of culturally changed landscape.

There is strong evidence of designed roads, highways, or both.

Structures are readily apparent and may range from scattered to small dominant clusters,

including utility corridors, farm buildings, microwave installations, and recreation sites.

Social: Frequency of contact is: Moderate to High developed sites, on roads and trails, and water surfaces; Moderate away from developed sites.

Managerial: Regimentation and controls obvious and numerous, largely in harmony with the human-made environment.

Urban:

Remoteness: No criteria.

Evidence of Humans: Setting is strongly structure dominated. Natural or natural appearing elements may play an important role but be visually subordinate. Pedestrian and other slow moving observers are constantly within view of artificial enclosure of spaces.

There is strong evidence of designed roads and/or highways and streets.

Structures and structure complexes are dominant.

Social: Large numbers of users onsite and in nearby areas.

Managerial: Regimentation and controls obvious and numerous

RECREATION ZONE- A planned and delineated area with designated recreation opportunities, settings, and activities.

RECRUITMENT- The increase in population caused by natural reproduction or immigration.

REFUGIUM- An area that has remained unaffected by adverse environmental changes to the surrounding area, allowing a population to survive where others have perished.

REPLACEMENT DEPOSIT- A mineral deposit formed by a new mineral of partly or wholly differing chemical composition growing in the body of an old mineral or aggregate.

RESEARCH NATURAL AREA (RNA) - An area of critical environmental concern that is a physical or biological unit in which current natural conditions are maintained insofar as possible. In RNAs activities such as grazing and vegetation manipulation are prohibited unless they replace natural processes and contribute to protecting and preserving an area. Moreover, such recreation as camping and gathering plants is discouraged.

RESEARCH DESIGN - A statement of proposed identification, documentation, evaluation, investigation, or other research that identifies the project's goals, methods and techniques, expected results, and the relationship of the expected results to other proposed activities or treatments.

RESISTANCE TO CONTROL (WILDFIRE) - The relative difficulty of building and holding a fire control line as affected by fire behavior, fuel, topography, and soil.

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, 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.

RESOURCE CONSERVATION AREA (RCA) - A land management designation that provides management consideration to areas that have special resources but don't need the protection conferred by an area of critical environmental concern.

RESOURCE MANAGEMENT PLAN (RMP) - (43 CFR 1601.0-5 (k)) "...a land use plan as described by the Federal Land Policy and Management Act. The resource management plan generally establishes in a written document-

1. Land areas for limited, restricted or exclusive use; designation, including ACEC designation; and transfer from Bureau of Land Management 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 action, including such measures as resource protection, access development, realty action, cadastral survey, etc., as necessary to achieve the above;
7. General implementation sequences, where carrying out a planned action is dependent upon prior accomplishment of another planned action; and
8. Intervals and standards for monitoring and evaluating the plan to determine the effectiveness of the plan and the need for amendment or revision.

It is not a final implementation decision on actions which require further specific plans, process steps, or decisions under specific provisions of law and regulations."

REST- See **GRAZING REST**.

RESTORATION (CULTURAL RESOURCE) - The process of accurately reestablishing the form and details of a property

or portion of a property together with its setting, as it appeared in a particular period of time. Restoration may involve removing later work that is not in itself significant and replacing missing original work. Also see **STABILIZATION (CULTURAL RESOURCE)**.

REST-ROTATION GRAZING - A grazing system in which one part of the range is ungrazed for an entire grazing year or longer while other parts are grazed for a portion or all of a growing season.

RIGHT-OF-WAY- A permit or easement that authorizes the use of lands for certain specified purposes, commonly for pipelines, roads, telephone lines, or powerlines.

RILL- A narrow, very shallow (a few centimeters deep), intermittent water course having steep sides and formed as a result of erosion.

RIPARIAN - Pertaining to or situated on or along the bank of streams, lakes, and reservoirs.

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

ROAD - (From BLM 9100 manual) "...a transportation facility used primarily by vehicles having four or more wheels, documented as such by the owner, and maintained for regular and continuous use.

ROADSIDE - a general term denoting the area adjoining the outer edge of the road.

ROAD AND ROUTE TYPES-

Primary Road - A regularly maintained route, paved or unpaved, wide enough for at least two vehicles to pass. Provides access between two major points. Serves a large area with many routes of lesser quality branching from it.

Secondary Road - Paved or unpaved, a regularly maintained one- to two-lane route with routes of lesser quality branching from it. Connects primary roads and major points.

Tertiary Road - Generally a two-track route that may or may not be usable by a two-wheel drive vehicle. Does not receive formal maintenance.

Single-Track Route - A route up to 1/2 meter wide upon which all-terrain vehicles or trucks are not allowed.

Way - A road-like feature used by vehicles having four or more wheels but not declared a road by the owner. A way receives no maintenance to guarantee regular and continuous use.

Spur - A route that exists for a specific purpose, such as access to a specific use or feature. Uses can be recreational or commercial. Features include campsites, mines, or range developments. A spur route is connected to another road or route type.

Reclaiming or Reclaimed (route) - A route that has had very little or no use, so that there is woody vegetation growing in the route that would be damaged by the passage of a vehicle. Erosion or vegetation may block the route and could damage a vehicle or cause it to get stuck.

ROCK CRAWLING - The use of specialized motor vehicles for crossing difficult terrain. Also known as extreme technical trail driving.

ROOT ZONE- The part of the soil that is or can be penetrated by plant roots.

ROUTE- Any motorized, non-motorized, or mechanized transportation corridor. Corridor may either be terrestrial or waterway. "Roads" and "Trails" are considered routes.

RUN - An area of swiftly flowing water that lacks surface agitation or waves and approximates uniform flow, and whose water surface is roughly parallel to the overall gradient of the stream reach.

RUNOFF - The portion of a drainage area's precipitation that flows from the area.

SAFE YIELD- The rate at which water can be withdrawn from a groundwater basin (aquifer) without depleting the supply so as to cause undesirable effects.

SALABLE MINERALS - Common variety minerals on public lands, such as sand and gravel, which are used mainly for construction and are disposed of by sales or special permits to local governments.

SCARIFICATION - A method of seedbed preparation that consists of exposing patches of mineral soil through mechanical action; the act or process of breaking up the ground in preparation for regeneration.

SCIENTIFIC DATA RECOVERY- See **CULTURAL RESOURCE DATA RECOVERY**.

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.

SEASONAL GRAZING - Grazing restricted to a specific season.

SECONDARY ROAD - See **ROAD AND ROUTE TYPES**.

SECTION - 640 acres, 1 mile square.

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 CONSULTATION - The requirement of Section 7 of the Endangered Species Act that all federal agencies consult with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service if a proposed action might affect a federally listed species or its critical habitat.

SEDIMENT - Solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water. Sediment includes chemical and biochemical precipitates and decomposed organic material such as humus.

SEDIMENTARY ROCKS- Rocks, such as sandstone, limestone, and shale, that are formed from sediments or transported fragments deposited in water.

SEDIMENTATION - The process or action of depositing sediment.

SEDIMENT LOAD (SEDIMENT DISCHARGE) - The amount of sediment, measured in dry weight or by volume, which 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.

SEDIMENT TRANSPORT - The movement of mineral and organic solid materials in a stream.

SEDIMENT YIELD - The amount of sediment removed from a watershed over a specified period, usually expressed as tons, acre-feet, or cubic yards of sediment per unit of drainage area per year.

SEGREGATION- The removal for a limited period, subject to valid existing rights, of a specified area of the public lands from the operation of the public land laws, including the mining laws, pursuant to the exercise by the Secretary of the Interior of regulatory authority to allow for the orderly administration of the public lands. See **WITHDRAWAL**.

SENSITIVE SPECIES- All species that are under status review, have small or declining populations, live in unique habitats, or need special management. Sensitive species include threatened, endangered, and proposed species as classified by the U.S. Fish and Wildlife Service.

SHARED USE TRAIL- A trail shared for a variety of uses such as motorized and non-motorized uses; a combination of non-motorized uses such as hiking, horseback riding, and bicycling; or a combination of motorized uses such as dirt bikes and small and large four-wheel-drive vehicles.

SHRINK-SWELL POTENTIAL- The susceptibility of soil to volume change due to loss or gain in moisture content.

SHOULDER - The portion of the roadway contiguous to the travelway for accommodation of stopped vehicles.

SIKES ACT OF 1974 - A Federal law that promoted federal-state cooperation in managing wildlife habitats on both BLM and Forest Service lands. The act requires BLM to work with State wildlife agencies to plan the development and maintenance of wildlife habitats and has as its main tool the habitat management plan.

SMALL TRACT LANDS - Parcels of public lands of 5 acres or less that have been found to be chiefly valuable for sale or lease as home, cabin, camp, recreational, convalescent, or business sites under the Act of June 1, 1938.

SMOKE PERMIT - In Arizona, a permit that an agency must obtain from the Arizona Department of Environmental Quality in order to conduct a prescribed burn. Also see **PRESCRIBED FIRE**.

SINGLE TRACK ROUTE- See **ROAD AND ROUTE TYPES**.

SOCIAL TRAIL- An unplanned random trail made by first visitors and then followed by others.

SOIL ERODIBILITY- The predisposition of a particular soil to be transported by wind or water if it is disturbed and exposed to the elements.

SOIL INFILTRATION - The ability of soil to absorb moisture that falls on it as precipitation.

SOIL MOISTURE - The water content stored in a soil.

SOIL PIPING - The removal of soil material through subsurface flow channels or “pipes” formed by seepage water.

SOIL PRODUCTIVITY- The capacity of a soil in its normal environment to produce a specified plant or sequence of plants under a specified system of management.

SOIL STABILITY - A qualitative term used to describe a soil’s resistance to change. Soil stability is determined by intrinsic properties such as aspect, depth, elevation, organic matter content, parent material, slope, structure, texture, and vegetation.

SOIL STRUCTURE - The physical constitution of soil material as expressed by size, shape, and the degree of development of primary soil particles and voids into naturally or artificially formed structural units.

SOLUTION MINING - A mining method by which salt and sulfur are extracted by injecting water (for salt) or superheated water (for sulfur) into deposits in the ground. The water dissolves the salt, and the resulting brine is pumped to the surface. Or the superheated water melts the solid sulfur, and the liquid sulfur is pumped to the surface.

SPECIAL CULTURAL RESOURCE MANAGEMENT AREA (SCRMA) - An area containing cultural resources that are of special importance for public use, scientific use, traditional use or other uses as defined in BLM Manual 8110.4.

SPECIAL LAND USE PERMIT (SLUP)- A permit granted for purposes neither authorized nor forbidden by law.

SPECIAL RECREATION MANAGEMENT AREAS (SRMAs) - Areas of intensive recreation use that will be managed to retain recreation opportunities while protecting other resources and reducing user conflicts. See **RECREATION MANAGEMENT ZONES**.

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 listed as threatened, endangered, candidate, or sensitive by the Federal Government or State governments.

SPLIT-ESTATE - Land whose surface rights and mineral rights are owned by different entities.

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. Also see **RESTORATION (CULTURAL RESOURCE)**.

STABILIZATION (SOIL) - Chemical or mechanical treatment to increase or maintain the stability of a mass of soil or otherwise improve its engineering properties.

STANDARDS AND GUIDELINES FOR RANGELAND HEALTH - See **ARIZONA STANDARDS FOR RANGELAND HEALTH AND GUIDELINES FOR GRAZING ADMINISTRATION**.

STAGING AREA - An area where participants in an activity gather and make final preparations for the activity.

STAMP - A machine for crushing ore, used particularly in gold milling.

STATE HISTORIC PRESERVATION OFFICER (SHPO) - The official within and authorized by each state at the request of the Secretary of the Interior to act as liaison for the National Historic Preservation Act. Also see **NATIONAL HISTORIC PRESERVATION ACT**.

STATE IMPLEMENTATION PLAN (SIP) - A detailed description of the programs a state will use to carry out its responsibilities under the Clean Air Act. SIPs are collections of the regulations used by a state to reduce air pollution. The Clean Air Act requires that the

Environmental Protection Agency approve each SIP.

STATE LANDS - See **STATE TRUST LANDS**.

STATE TRUST LANDS - Lands granted to Arizona by the Federal Government at territorial establishment and at statehood. Totaling 9.4 million acres, these lands are managed by the Arizona State Land Department to yield revenue over the long term for the 14 trust beneficiaries. The chief beneficiary consists of the public schools. Whenever Arizona sells or leases these lands and their natural resources, it must pay the beneficiaries. Revenues from land sales are maintained in a permanent fund managed by the State Treasurer, and interest from this fund is paid to the beneficiaries.

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

STOCK TANK (POND) - A water impoundment created by building a dam, digging a depression, or both, to provide water for livestock or wildlife.

STREAMBANK - The portion of a stream channel that restricts the sideward movement of water at normal water levels. The streambank's gradient often exceeds 45 ° and exhibits a distinct break in slope from the stream bottom.

STREAMBANK STABILITY - A streambank's relative resistance to erosion, which is measured as a percentage of alteration to streambanks.

SUBMERGENT VEGETATION - Aquatic plants that grow only within water and do not break the water's surface. Also see **EMERGENT VEGETATION**.

SUBSTRATE - (1) Mineral and organic material forming the bottom of a waterway or water body; (2) The base or substance upon which an organism is growing.

SUBSURFACE - Of or pertaining to rock or mineral deposits which generally are found below the ground surface.

SUBWATERSHED - A watershed subdivision of unspecified size that forms a convenient natural unit.

SUCCESSION - See **PLANT SUCCESSION**.

SUCCULENTS - Plants such as cacti that have fleshy tissues designed to conserve moisture.

SUPPLEMENTAL FEED - Concentrates or harvested feed that is fed to livestock to correct the deficiencies of a range diet.

SUPPLEMENTAL WILDERNESS VALUES- Resources not required for an area to be designated a wilderness but that are considered in assessing an area's wilderness potential. Such values include ecological, geologic, and other features of scientific, educational, scenic, or historical value.

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.

SWALE - A commonly wet or moist low-lying or depressed land area.

TAILINGS - The waste matter from ore after the extraction of economically recoverable metals and minerals.

TAKE - As defined by the Endangered Species Act, "...to harass, harm, pursue, hunt, shoot,

wound, kill, capture, or collect, or attempt to engage in any such conduct..."

TARGET SPECIES - Plant species to be reduced or eliminated by a vegetation treatment. Also see **VEGETATION TREATMENTS**.

TERRESTRIAL SPECIES - Ground-dwelling plants and animals.

TERTIARY PERIOD - The earlier (65 million to 1.8 million years ago) of the two geologic periods in the Cenozoic era of geologic time.

TERTIARY ROAD - See **ROAD AND ROUTE TYPES**.

THREATENED SPECIES - Any plant or animal species likely to become endangered within the foreseeable future throughout all or a part of its range and designated by the U.S. Fish and Wildlife Service under the Endangered Species Act. Also see **ENDANGERED SPECIES**.

TRAIL- (Interagency definition) 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.

TRAILHEAD - The terminus of a hiking, horse, or bicycle trail accessible by motor vehicle and sometimes having parking, signs, a visitor register, and camping and sanitary facilities.

TRANSFER PAYMENT - A government grant to an individual of money that represents a gift without anything being received or required in return. Examples of transfer payments include student scholarship grants, welfare checks, and social security benefits.

TRANSITIONAL PATHWAYS - The processes that cause a shift from one vegetation state to another.

TRAVERTINE - A mineral consisting of calcium carbonate deposited by spring waters.

TREAD LIGHTLY- A not-for-profit organization whose mission is to increase awareness of ways to enjoy the great outdoors while minimizing human impacts.

TRIALS - Off-road competitions in which the rider has to surmount obstacles. Points are deducted if the rider puts his feet on the ground, goes outside the marked course, or fails to clear an obstacle.

TURBIDITY- Cloudiness of water measured by how deeply light can penetrate it from the surface. Highly turbid water is often called “muddy” although all kinds of suspended particles contribute to turbidity.

UNAUTHORIZED USE - Any use of the public lands not authorized or permitted.

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

USABLE FORAGE- That portion of the forage that can be grazed without damage to the basic resources; may vary with season of use, species, and associated species.

UNGULATES - Hoofed animals including ruminants but also horses, tapirs, elephants, rhinoceroses, and swine.

UNIQUE FARMLAND - As defined by the Farmland Protection Policy Act of 1981, land other than prime farmland that is used for producing specific high-value food and fiber crops, as determined by the Secretary of Agriculture. Unique farmland has the special combination of soil quality, location, growing

season, and moisture supply needed to economically produce sustained high quality or high yields of specific crops when treated and managed according to acceptable farming methods. Examples of such crops include citrus, tree nuts, olives, cranberries, fruits, and vegetables. Also see **PRIME FARMLAND**.

UNIQUE WATER - A water body determined by the Arizona Department of Environmental Quality as an outstanding water resource of the state because of exceptional recreational or ecological significance, such as important geology, flora, fauna, water quality, aesthetic values, or wilderness characteristics.

UPLANDS - Lands at higher elevations than the alluvial plain or low stream terrace; all lands outside the riparian-wetland and aquatic zones.

URBAN INTERFACE (WILDLAND-URBAN INTERFACE) - The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetation. This interface creates conflicts and complicates fighting wildfires and conducting prescribed burns, as well as all other natural resource management activities.

UTILIZATION (FORAGE) - The proportion of the current year’s forage consumed or destroyed by grazing animals. Utilization is usually expressed as a percentage.

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 on segregated lands requires BLM to conduct a valid existing rights determination.

VANDALISM (CULTURAL

RESOURCE) - Malicious damage or the unauthorized collecting, excavating, or defacing of cultural resources. Section 6 of the Archaeological Resources Protection Act states that "no person may excavate, remove, damage, or otherwise alter or deface any archaeological resource located on public lands or Indian lands...unless such activity is pursuant to a permit issued under section 4 of this Act."

VASCULAR PLANT- A plant in the phylum Tracheophyta, which includes spermatophytes (seed plants) and pteridophytes (ferns and related plants).

VEGETATION STATES- The different plant communities produced by an ecological site.

VEGETATION STRUCTURE - The composition of an area's vegetation--plant species, growth forms, abundance, vegetation types, and spatial arrangement.

VEGETATION TREATMENTS-

Treatments that improve vegetation condition or production. Such treatments may include seedings; prescribed burning; or chemical, mechanical, and biological plant control.

VEGETATION TYPE - A plant community with distinguishable characteristics.

VIABILITY- The capability of living, developing, growing, or germinating under favorable conditions.

VIEWSHED - The entire area visible from a viewpoint.

VISITOR DAY- 12 visitor hours, which may be aggregated continuously, intermittently, or simultaneously by one or more people.

VISUAL ASPECT- The visual first impression of vegetation at a particular time or seen from a specific point.

VISUAL RESOURCE MANAGEMENT

(VRM) - The planning, design, and implementing of management objectives to provide acceptable levels of visual impacts for all BLM resource management activities.

VISUAL RESOURCE MANAGEMENT

(VRM) CLASSES - Classes with specific objectives for maintaining or enhancing scenic quality including the kinds landscape modifications that are acceptable to meet the objectives.

Class I: (Preservation) provides for natural, ecological changes only. This class includes wilderness areas, some natural areas, some wild and scenic rivers, and other similar sites where landscape modification should be restricted.

Class II: (Retention of the landscape character) includes areas where changes in any of the basic elements (form, line, color, or texture) caused by management activities should not be evident in the characteristic landscape.

Class III: (Partial retention of the landscape character) includes areas where changes in the basic elements caused by management activities may be evident in the characteristic landscape. But the changes should remain subordinate to the existing landscape character.

Class IV: (Modification of the landscape character) includes areas where changes may subordinate the original composition and character. But the changes should reflect what could be a natural occurrence in the characteristic landscape.

VOLATILE ORGANIC COMPOUNDS

(VOCs) - Carbon-containing compounds that with few exceptions evaporate into the air. Often having odors, VOCs contribute to the forming of smog and may themselves be toxic. Some

examples of VOCs are gasoline, alcohol, and solvents used in paints.

WARM-SEASON PLANTS - Plants whose major growth occurs during the spring, summer, or fall and that are usually dormant in winter. Also see **COOL-SEASON PLANTS**.

WATER BAR - A low ridge of dirt, rock, or other material placed across a trail or dirt road on a hill to divert flowing water and protect the trail or road from erosion.

WATER DEVELOPMENTS - Construction of artificial, or modification of natural water sources to provide reliable, accessible water for livestock, wildlife, or people.

WATERSHED (CATCHMENT) - A topographically delineated area that is drained by a stream system, that is, the total land area above some point on a stream or river that drains water past that point. The watershed is a hydrologic unit often used as a physical-biological unit and a socioeconomic-political unit for planning and managing natural resources.

WATERSHED CONDITION (WATERSHED HEALTH) - The comparison of watershed processes to normal or expected measurements of properties such as soil cover, erosion rate, runoff rate, and groundwater table elevation; an assessment or categorization of an area by erosion conditions, erosion hazards, and the soil moisture/temperature regime.

WATERSHED FUNCTION - The combination of processes attributed to watersheds as part of the hydrologic cycle, including interception of rain by plants, rocks, and litter; surface storage by the soil; groundwater storage; stream channel storage; soil evaporation; plant transpiration; and runoff. These processes affect the following properties of the watershed: runoff rate, water infiltration rate, soil building rate, soil erosion rate,

groundwater recharge rate, groundwater discharge rate, water table elevation, and surface water discharge. These properties in turn affect plant communities through soil attributes, including soil parent material, soil moisture, and nutrients; stream and rivers through flooding duration and magnitude, as well as sediment load, which structures the dimension, pattern, and profile of channels; and lakes and reservoirs through sedimentation and nutrient input.

WAY- See **ROAD AND ROUTE TYPES**.

WEED - Any plant that interferes with management objectives. A weed may be native or non-native, invasive or passive, or non-noxious.

WETLAND - An area that is inundated or saturated by surface or ground water often and long enough to support and that under normal circumstances supports a prevalence of vegetation typically adapted for life in saturated soil. Wetlands include marshes, shallows, swamps, lake shores, bogs, muskegs, wet meadows, estuaries, cienegas, and riparian areas.

WILD AND SCENIC RIVER CORRIDOR - See **NATIONAL WILD AND SCENIC RIVER SYSTEM**.

WILDERNESS CHARACTERISTICS - BLM Instruction Memorandum 2003-275 Change 1 defines Wilderness Characteristics as, "Features of the land associated with the concept of wilderness that may be considered in land use planning when BLM determines that those characteristics are reasonably present, of sufficient value (condition, uniqueness, relevance, importance) and need (trend, risk), and are practical to manage.

Naturalness - Lands and resources exhibit a high degree of naturalness when affected primarily by the forces of nature and where the imprint of human activity is substantially unnoticeable. BLM has authority to inventory, assess, and/or monitor the attributes of the lands and resources on public lands, which, taken

together, are an indication of an area's naturalness. These attributes may include the presence or absence of roads and trails, fences and other improvements; the nature and extent of landscape modifications; the presence of native vegetation communities; and the connectivity of habitats.

Solitude and Primitive/Unconfined Recreation - Visitors may have outstanding opportunities for solitude, or primitive and unconfined types of recreation when the sights, sounds, and evidence of other people are rare or infrequent, where visitors can be isolated, alone or secluded from others, where the use of the area is through non-motorized, non-mechanical means, and where no or minimal developed recreation facilities are encountered."

WILDCAT ROAD - A nonpermitted road on federally managed land.

WILDFIRE - Any wildland fire that is not meeting management objectives and therefore requires a suppression response.

WILDLAND FIRE - Any nonstructure fire, other than prescribed fire, that occurs in the wildland.

WILDLAND-URBAN INTERFACE (WUI) - Areas where urban fuels directly meet natural fuels. This interface occurs mainly within 66 to 200 feet of houses, where fire most directly threatens houses and where a defensible zone can be developed.

WILDLIFE - A broad term that includes birds, reptiles, amphibians, and nondomesticated mammals.

WILDLIFE MANAGEMENT AREAS (WMAs) - General areas that are managed to enhance the habitat of one or more wildlife species.

WING FENCE - Fencing extending out from a corral and serving to help funnel livestock into the corral.

WITHDRAWAL- Withholding an area of federal land from settlement, sale, location, or entry under some or all of the general land laws, for the purpose of limiting activities under those laws in order to maintain other public values in the area or reserving the area for a particular public purpose or program; or transferring jurisdiction over an area of federal land, other than *property* governed by the Federal Property and Administrative Services Act, from one department, bureau, or agency to another department, bureau, or agency. Also see **SEGREGATION**.

XERO-RIPARIAN - An area in a drainage that supports plant species more characteristic of uplands than wetlands, but that is more densely vegetated than areas removed from the drainage. Any flows in these channels are characteristically ephemeral but water may also be subsurface and the drainage may not flow.