

## GLOSSARY

**Access.** Permission, liberty, or ability to enter, approach, communicate with, or pass to and from; freedom or ability to obtain or make use of. Legal access to property indicates a legally conferred right of access via public property or road, or access across private property via right-of-way or easement.

**Acre-foot (af).** The volume of liquid or solid required to cover one acre to a depth of one foot, or 43,560 cubic feet; measured for volumes of water, reservoir rock, etc.

**Activity Plan.** A more detailed BLM plan of actions to implement planning decisions over a specified time period; e.g., allotment management plans; recreation area management plans; habitat management plans; or cultural resource project plans.

**Adit.** A nearly horizontal passage in an underground mine, driven from the surface, by which a mine may be entered, ventilated, and/or dewatered.

**Agglomerate.** A volcanic breccia formed by disruption of a solidified crust or hardened plug of lava. Blocks may fit together as a loose mosaic or be completely disordered.

**Agreement to Initiate a Land Exchange (ATI).** A legal document that outlines the agreement between the BLM and a proponent regarding the initiation of a proposed land exchange.

**Airshed.** The contributing three-dimensional space in which air quality can be evaluated.

**Allopatric.** Being geographically separate, or nearly so, from another population of the same species.

**Allotment.** A land area where one or more operators graze their livestock. The allotment generally consists of public land but may include parcels of private and state-owned lands. The number of livestock and season of use are stipulated for each allotment by the landowner.

**Alluvial Fan.** Made of soil and sand left by rivers or floods.

**Alluvium.** Unconsolidated or poorly consolidated gravel sands and clays deposited by streams and rivers on riverbeds, flood plains, and alluvial fans.

**Andesite.** A dark colored, fine-grained extrusive rock that, when porphyritic, contains phenocrysts composed primarily of zoned sodic plagioclase and one or more of the mafic minerals, with a ground mass composed generally of the same minerals as the phenocrysts; the extrusive equivalent of diorite.

**Animal Unit Month (AUM).** The amount of forage needed to sustain one cow or its equivalent for one month.

**Annual (Ephemeral) Plant.** A plant that completes its life cycle and dies in one year or less. (Range Term Glossary Committee 1974.)

**Appraisal.** Act of placing an estimated value on an asset or assets.

**Aquifer.** A body of rock that is sufficiently permeable to conduct groundwater and to yield economically significant quantities of water to wells and springs.

**Area of Critical Environmental Concern (ACEC).** An area of public land where special management attention is required to protect important historic, cultural, or scenic values, fish and wildlife or natural systems or processes, or to protect life and safety from natural hazards.

**Arizona Mined Land Reclamation Act.** Legislative act passed in 1994 by the Arizona Legislature; established the State of Arizona as the administrator of reclamation regulations for private land within the state and provided statutory authority to the Arizona State Mine Inspector for the development and adoption of Mined Land Reclamation Rules. It requires that metalliferous mining and exploration operations that create surface disturbances greater than five acres must meet the State reclamation regulations.

**Artesian Well.** A well in which water rises under pressure from a permeable stratum overlaid by impermeable rock.

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**Artifact.** Any object showing human workmanship of modification, especially from a prehistoric or historic culture.

**Backfill.** Earth, overburden, mine development rock, or imported material used to replace ore or other material removed during mining.

**Bajada.** Spanish word meaning “step” that refers to a gradually sloping alluvial area of mountains.

**Basalt.** A dark-colored igneous rock, commonly extrusive, composed primarily of calcic plagioclase and pyroxene; the fine-grained equivalent of *gabbro*. The plagioclase is normally zoned and usually ranges in composition from byronite to labradorite; augite, pigeonite, and hypersthene are the common pyroxenes. Apatite and magnetite are almost always present, and olivine is common.

**Best Available Demonstrated Control Technology (BADCT).** Processes, structures, operating methods, or other alternatives developed by EPA and in Arizona, ADEQ, used to design, construct, and operate a facility so as to ensure the greatest degree of discharge reduction achievable, including, where practicable, a technology permitting no discharge of pollutants.

**Biome.** A climax community that characterizes a particular natural region; esp. A particular type of vegetation, climatically bounded, which dominates a large geographic area.

**Bosque.** Spanish word for “forest” used to describe a riparian plant association typically found in floodplains and usually dominated by one species, e.g., mesquite.

**Cienega.** A marshy area where the ground is wet due to the presence of seepage or springs, often with standing water and abundant vegetation. The term is commonly applied in arid regions such as the southwestern U.S.

**Clean Water Act (CWA).** The Federal Water Pollution Control Act of 1972, as amended.

**Code of Federal Regulations (CFR).** The compilation of federal regulations adopted by federal agencies through a rule-making process.

**Colluvium.** General term applied to loose and incoherent deposits, usually at the foot of a slope or cliff (e.g., talus and cliff debris) and brought there chiefly by gravity.

**Community Type.** A group of plants living in a specific region under relatively similar conditions.

**Compactible Soil.** A property of a sedimentary soil that permits it to decrease in volume or thickness under load; it is a function of the size, shape, hardness, and brittleness of the constituent particles.

**Concentrator.** Facility where ore is crushed, ground, and separated to produce a highly concentrated ore.

**Cone of Depression.** The depression of heads around a pumping well caused by the withdrawal of water.

**Cretaceous.** The final period of the Mesozoic era (after the Jurassic and before the Tertiary period of the Cenozoic era), thought to have covered the span of time between 135 and 65 million years ago; also, the corresponding system of rocks.

**Critical Habitat.** Defined in Section 3(5)(A) of the Endangered Species Act as: “(I) the specific areas within the geographic area occupied by a species...on which are found those physical or biological features (I) essential to the conservation of the species, and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed ... upon a determination by the Secretary that such areas are essential for the conservation of the species.”

**Cultural Resources.** Those fragile and nonrenewable remains of human activity, occupation or endeavor, reflected in district, sites, structures, building, objects, artifacts, ruins, works of art, architecture and natural features that were of importance in past human events. These resources consist of: 1) physical remains, 2) areas where significant human events occurred, even though evidence of the event no longer remains, and 3) the environment immediately surrounding the actual resource.

**Cumulative Impact.** The impact on the environment which results from incremental impact of the action when added to other past, present, and reasonably foreseeable future actions; cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

**Delist.** To remove a species from the federal list of endangered and threatened species, thereby removing protection of the Endangered Species Act.

**Development Rock.** Also called overburden or wasterock; nonmineralized rock or rock of low economic value that is removed during mining operations. It is typically stockpiled and used to construct roads, yards, building pads, dams, and embankments.

**Dike.** 1. A tabular body of igneous rock that cuts across the structure of adjacent rocks or cuts massive rocks. 2. A wall or embankment built around a low-lying area to prevent flooding.

**Dip (pertaining to a fault).** The angle that a stratum or any planar feature makes with the horizontal, measured perpendicular to the strike and in the vertical plane.

**Direct Impact.** Effects that are caused by the action and that occur at the same time and place.

**Discharge.** The volume of water flowing past a point per unit time, commonly expressed as cubic feet per second (cfs), gallons per minute (gpm), or million gallons per day (mgd).

**Disposal.** Transferring of land out of federal ownership by various methods such as exchange,

sale, Recreation and Public Purposes Act, and/or state indemnity selection.

**District.** A former BLM administrative area composed of one or more resource areas; recently replaced by "field office."

**Downlist.** To move from top priority to a lower priority of the list.

**Drawdown.** The lowering of the water level in a well as a result of withdrawal; the reduction in head at a point caused by the withdrawal of water from an aquifer.

**Ecotone.** The transition zone between two major ecological communities where one does not merge gradually into the other, for example, that between grassland and woodland.

**Effects.** "Effects" include a) Direct effects, which are caused by the action and occur at the same time and place. b) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. Effects and impacts as used in these regulations are synonymous. Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.

**Electroshocking.** Field method for assessing fish populations within a body of water.

**Electrowinning.** The process of electrolytically depositing metals, or separating them from their ores or alloys.

**Endangered or Threatened Species.** Any species in danger of extinction throughout all or a significant portion of its range. This definition

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excludes species of insects that the Secretary of the Interior determines to be pests and whose protection under the Endangered Species Act would present an overwhelming and overriding human risk. A threatened species is any species likely to become endangered within the foreseeable future throughout all of a significant part of its range.

**Eocene.** An epoch of the Tertiary period, after the Paleocene and before the Oligocene, covering a span of time from about 55 to 35 million years ago.

**Environmental Impact Statement (EIS).** A detailed statement required by the National Environmental Policy Act (NEPA) when an agency proposes a major federal action significantly affecting the quality of the human environment. There is usually a Draft EIS followed by a Final EIS.

**Equal Monetary Value.** The dollar value of the selected and offered lands must be within 25 percent of each other.

**Ephemeral Stream.** A stream or portion of a stream that flows briefly in direct response to precipitation in the immediate vicinity, and whose channel is at all times above the water table.

**Erosion.** The wearing away of soil and rock by weathering, mass wasting, and action of streams, glaciers, waves, wind and underground water.

**Evaporation.** The portion of precipitation returned to the air in the form of vapor.

**Evapotranspiration.** An amount of water lost to the atmosphere that is consumptively used by plants through transpiration and water evaporated from bare soils.

**Exploration.** The search for economic deposits of minerals, ore, and other materials through practices of geology, geochemistry, geophysics, drilling, and/or mapping.

**Fault.** A fracture in rock units along which there has been displacement.

**Field Office.** BLM's geographic and administrative divisions within a state; formerly BLM Districts.

**Flaked Stone.** Debitage resulting from lithic tool manufacture.

**Fluvial.** Of or pertaining to rivers; growing or living in a stream or river; produced by the action of a stream or river.

**Form.** The mass or shape of an object or objects which appear unified, such as a vegetative opening in a forest, a cliff formation, or a water tank.

**Fugitive Emissions.** Hydrocarbon emissions released into the atmosphere from any point other than a stack, chimney, vent, or other functionally equivalent opening (EPA Region IX).

**Gila Box Riparian National Conservation Area (RNCA).** A special management area designated by Congress to conserve, protect, and enhance the riparian and related natural and cultural resource values of the Gila River and Bonita Creek.

**Graben.** An elongate, relatively depressed trough or basin that is bounded by high-angle, normal faults on its long sides.

**Granitoid.** A granitic rock.

**Groundwater Gradient.** Direction of flow of groundwater.

**Groundwater Table.** The surface between the zone of saturation and the zone of aeration; that surface of a body of unconfined ground water at which the pressure is equal to that of the atmosphere.

**Growth Media.** A substance or material that promotes or supports vegetation.

**Hohokam.** Prehistoric people inhabiting southern and south-central Arizona and Northern Mexico that primarily lived along the banks of the Gila, Salt, and Santa Cruz rivers.

**Holocene.** An epoch of the Quaternary period, from the end of the Pleistocene, approximately 10 thousand years ago, to the present time.

**Hydraulic Conductivity.** The capacity of a rock to transmit water. It is expressed as the volume of

water at the existing kinematic viscosity that will move in unit time under a unit hydraulic gradient through a unit area measured at right angles to the direction of flow.

**Hydraulic Gradient.** Change in head per unit of distance measured in the direction of the steepest change.

**Hydrothermal.** Of or pertaining to hot water, to the action of hot water, or to the products of this action, such as a mineral deposit precipitated from a hot aqueous solution; also, said of the solution itself.

**Igneous.** Rock or mineral that solidified from molten or partly molted magma; processes relating to or resulting from the formation of such rocks.

**Impact.** A modification in the status of the environment brought about by the action.

**Indirect Impact.** Effects caused by the action and are later in time or are farther removed in distance but are still reasonably foreseeable; indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate and related effects on air and water and other natural systems, including ecosystems.

**Infrastructure.** The basic framework or underlying foundation of a community, or project including road networks, electric and gas distribution, water and sanitation services, and facilities.

**Institutional Controls.** Controls including deed restrictions to protect public safety, fencing district, and physical control of access.

**Interdisciplinary (ID) Team.** A group of agency resource specialists with various backgrounds who are responsible for preparation and review of the NEPA document for a proposed federal action.

**Lacustrine.** Pertaining to, produced by, or inhabiting a lake or lakes.

**Laramide Age.** A time of deformation, typically recorded in the eastern Rocky Mountains of the U.S., whose several phases extended from the late Cretaceous period until the end of the Paleocene epoch.

**Leaching.** Extracting a soluble metallic compound from an ore by selectively dissolving it in a suitable solvent, such as weak sulfuric acid.

**Leasable Minerals.** Those minerals or materials designated as leasable under the Minerals Leasing Act of 1920. They include coal, phosphate, asphalt, sulphur, potassium, sodium, oil, and gas. Geothermal resources are also leasable under the Geothermal Steam Act of 1970. Development of these minerals on public lands requires that a royalty be paid to the U.S. government.

**Line.** The path, real or imagined, that the eye follows when perceiving abrupt differences in form, color, or texture. Within landscapes, lines may be found as ridges, skylines, structures, changes in vegetative types, or individual trees and branches.

**Lithic Artifact.** Pertaining to, or made of stone.

**Lithologic Unit.** A unit of rock that can be described on the basis of such characteristics as color, mineralogic composition, and grain size.

**Locatable Minerals.** Any mineral that can have a mining claim filed on it under the Mining Law of 1872 as amended, e.g. copper, gold, silver.

**Long-Term Management Area (LTMA).** A designation used by the BLM Safford Field Office for geographic areas within the district as identified in the amended RMP in which the BLM seeks to retain or acquire lands in order to maintain its long-term management presence.

**Mafic.** Said of igneous rocks rich in dark-colored iron and magnesium minerals.

**Mano.** Stone tool used for grinding.

**Metamorphic Rock.** Any rock derived from pre-existing rocks by mineralogical, chemical, and/or structural changes, essentially in the solid state, in response to marked changes in temperature, pressure, shearing stress, and chemical environment, generally at depth in the earth's crust.

**Metate.** A flat stone with a depression for holding maize or other grains to be ground.

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**Mineral Entry.** Authority to enter public lands for the purposes of developing minerals in an orderly, organized manner.

**Mineralized Area.** An area that has exposures or sub-surface deposits of potentially valuable minerals.

**Mineralizing Unit.** A lithological unit responsible for introducing economic minerals into adjacent rocks.

**Mining Activity.** Any activity directly involved in mineral exploration, development or production at or on an exploration operation or mining unit.

**Mining District.** A section of country, usually designated by name, that has described or understood boundaries where minerals are found and mined under rules and regulations prescribed by the miners, consistent with the Mining Law of 1872.

**Mining Notice of Intent (NOI).** Similar to a Mining Plan of Operations but applies only to activities involving no more than five acres of surface disturbance of federal lands.

**Mining Plan of Operations (MPO or also Plan of Operations).** As required by 43 CFR 3809; Operators submit plans of operation to the BLM that outline the name and address of the operator; location of the proposed area of operation; and information sufficient to describe the type of operation proposed, the type and standards of roads, the means of transportation to be used, the period when the proposal will take place, and measures to be taken to meet the requirements for environmental protection.

**Miocene.** An epoch of the Tertiary period, after the Oligocene and before the Pliocene covering a span of time from about 23 to 5.5 million years ago.

**Mitigation.** Mitigation includes a) avoiding the impact altogether by not taking a certain action or parts of an action, b) minimizing impacts by limiting the degree or magnitude of the action and its implementation, c) recertifying the impact by repairing, rehabilitating, or restoring the affected environment, d) reducing or eliminating the impact over time by preservation and maintenance

operations during the life of the action, e) compensating for the impact by replacing or providing substitute resources or environments.

**National Environmental Policy Act (NEPA).** Legislative act passed in 1969 as the national charter for analysis of impacts of federal actions upon the quality of the human environment. NEPA establishes policy, sets goals, and provides means for carrying out the policy. Regulations from 40 CRF 1500-1508 implement the act.

**National Historic Preservation Act (NHPA).** An act that provided the administrative and legislative power to carry out the spirit and intentions of the Historic Sites Act of 1935 and expand its policies to include protection and preservation of significant historic properties.

**National Pollutant Discharge Elimination System (NPDES).** A water quality management program overseen by the Environmental Protection Agency involving permitting for point source dischargers to waters of the United States.

**National Register of Historic Places (NRHP).** A list, kept by the Secretary of the Interior, of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, and culture.

**Native Species.** Organisms that originated in the area in which they are found, i.e., they naturally occur in that area.

**Normal Fault.** A fault in which the hanging wall appears to have moved downward relative to the floorwall. The angle of dip is usually 45-90 degrees.

**Notice of Decision (NOD).** A formal notification of an agency decision published in the Federal Register; e.g., the agency decision in the realty process regarding the disposal or acquisition of lands.

**Notice of Exchange Proposal (NOEP).** Notification of a realty action, a proposed land exchange, that is published in the federal register per the requirements of FLEFA and FLPMA.

**Notice of Intent (NOI).** First formal step in the EIS process, consisting of a notice published in the Federal Register that an Environmental Impact Statement will be prepared and considered for a proposed action.

**Offered Lands.** The privately owned lands that are being offered in exchange for public lands in a land exchange; cf. "selected lands."

**Oligocene.** An epoch of the Tertiary period, after the Eocene and before the Miocene covering a span of time from about 35 to 23 million years ago.

**Operator.** Any person who directs mining activity at an exploration operation mining unit.

**Ore.** A mineral deposit of high enough quality to be mined at a profit.

**Overburden.** Rock and soil cleared away before mining.

**Overstory.** The upper most layer of vegetation.

**Paleocene.** The first epoch of early Tertiary period, after the Cretaceous period and before the Eocene epoch, covering a span of time from about 65 to 55 million years ago.

**Partial Pit Backfill.** Placing development rock in a mined-out pit to less than the capacity of the pit.

**Patent.** A document conveying title to land from the U.S. government to private ownership.

**Patented Claims.** Federal mineral claims that have become private lands secured from the U.S. government by a private entity through compliance with the Mining Law of 1872.

**Petroglyph.** Literally, a rock carving; it usually excludes writing and therefore is of prehistoric or protohistoric age.

**pH.** The measure of the acidity or basicity of a solution.

**Pictograph.** A painting or drawing on a rock wall or the like by ancient or prehistoric peoples.

**Pleistocene.** An epoch of the Quaternary period, after the Pliocene and before the Holocene. It began about two million years ago and lasted until the start of the Holocene some 10,000 years ago.

**Pliocene.** An epoch of the Tertiary period, after the Miocene and before the Pleistocene, covering a span of time from about 5.5 to 2 million years ago.

**Polychrome Sherd.** Multicolored pottery fragmentation.

**Precambrian.** All geologic time, and its corresponding rocks, before the beginning of the Cambrian period of the Paleozoic era (about 570 million years ago); it is equivalent to about 90% of geologic time.

**Pregnant Leach Solution (PLS).** Solution from the leaching process that contains dissolved metals.

**Prill.** Ammonium nitrate in bead form; used in the ore blasting process.

**Priority Species.** Animal and plant species and habitats having special significance for management. These include endangered, threatened, and special status species; species of high economic or recreational value; and aquatic, wetland, and riparian habitats. Also included are populations of animals or plants recognized as significant for one or more factors such as density, diversity, size, public interest, remnant character, or age.

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**Project Alternatives.** Alternatives to the proposed project developed through the NEPA process.

**Pyroclastic.** Pertaining to clastic rock material formed by volcanic explosion or aerial expulsion from a volcanic vent; also, pertaining to rock texture of explosive origin. It is not synonymous with the adjective “volcanic”.

**Quartz Monzonite-Granadiorite Porphyry.** A granitic rock in which quartz comprises 10-50% of the felsic constituents, and in which the alkali feldspar/total feldspar ratio is between 35% and 65%; the approximate intrusive equivalent of rhyodacite.

**Quaternary.** The second period of the Cenozoic era, consisting at the Pleistocene and Holocene epochs. Following the Tertiary; also, the corresponding system of rocks. It began two to three million years ago and extends to the present.

**Reclamation.** Measures that are taken on surface disturbances at exploration operations and mining units to achieve stability and safety consistent with postmining land use objectives specified in the Reclamation Plan.

**Record of Decision (ROD).** A public document that reflects the agency's final decision on a proposed project, rationale behind that decision, and commitments to monitoring and mitigation.

**Refugia.** An area, usually more or less isolated, which with respect to fauna and flora, has remained relatively unchanged in contrast to surrounding areas which have been markedly affected by environmental changes; a refuge

**Reserves.** Identified resources of mineral-bearing rock from which the mineral can be extracted profitably with existing technology and under present economic conditions.

**Resource Conservation Area (RCA).** A management designation that provides management consideration to areas with special resource values.

**Resource Management Plan (RMP).** A planning document developed by the BLM that provides guidelines and direction for making land tenure decisions for short-term and long-term management of public lands and resources within a district.

**Rhyolite.** An extrusive igneous rock; the extrusive equivalent of granite.

**Right-of-way (ROW).** A legal right to use, occupy or access land or water areas for specified purposes.

**Riparian.** Plant communities occurring in association with any spring, lake, river, stream, creek, wash, arroyo, or other body of water or channel having banks and bed through which waters flow at least periodically to perennially. These habitats are generally characterized or distinguished by a difference in plant species composition or an increase in the size and/or density of vegetation as compared to upland areas.

**Riprap.** Large fragments of broken rock. Thrown together irregularly (as offshore or on a soft bottom) or fitted together (as on the downstream face of a dam). Its purpose is to prevent erosion by water and thereby preserve a surface, slope, or underlying structure. It is used for irrigation channels, river-improvement works, spillways at dams, and sea walls for shore protection.

**Roadfill.** Fill material used to bring the roadbed to a level elevation.

**Runoff.** That part of precipitation that appears in surface streams; precipitation that is not retained on the site where it falls and is not absorbed by the soil.

**Sacred Site.** Any specific, discrete, narrowly delineated location on federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such as site.

**Salable Minerals.** Common variety minerals used mostly for construction projects (e.g. sand and gravel). These are disposed of by the government either through sales or special free-use permits to non-profit organizations.

**Salada.** A term used in the southwestern U.S. for a salt-covered plain where a lake has evaporated.

**Scope.** Scope consists of the range of actions, alternatives, and impacts to be considered in the Environmental Impact Statement.

**Scoping.** The process of involving potentially interested and/or affected parties in identifying the issues of concern that will be addressed in the EIS.

**Section.** A one-square-mile area (640 acres) forming one of the 36 subdivisions of a township.

**Seining.** To fish using a seine (vertical net).

**Selected Lands.** The publicly owned lands that have been selected by the project proponent for acquisition in a land exchange; cf. "offered lands".

**Sensitive species.** Those species designated by a BLM State Director, in cooperation with a state agency responsible for managing the species, as sensitive. Sensitive species are those species (1) under status review by the Fish and Wildlife Service/National Marine Fisheries Service; (2) whose numbers are declining so rapidly that federal listing may become necessary; (3) with typically small and widely dispersed populations, or; (4) inhabiting ecological refuge or other specialized or unique habitats.

**Shaft.** A vertical opening to an underground mine.

**Sherd.** A fragment of prehistoric pottery.

**Silicic.** Said of a silica-rich igneous rock or magma (not a mineral).

**Sill.** A tabular igneous intrusion that parallels the planar structure of the surrounding rock.

**Solution Extraction.** Also called solvent extraction. The processing of the pregnant leach

solution to produce raffinate and copper-loaded organic.

**Solution Extraction/Electrowinning (SX/EW).** A process to extract practically pure copper from sulfuric acid solution that has been percolated through stockpiles of copper-bearing rock. The process consists of four steps: leaching stockpiles with acid, extracting copper from leaching solution to produce "loaded organic," mixing electrolyte with loaded organic to produce "rich electrolyte," and passing electric current through rich electrolyte to winnow out the pure copper. This process replaces the need for a smelter for oxidized ores.

**Special status species.** A grouping of wildlife species that includes proposed species, threatened and endangered species, candidate species, state listed species, and sensitive species.

**Species.** A group of individuals of common ancestry that closely resemble each other structurally and physiologically, and in nature interbreed producing fertile offsprings.

**Stability.** The condition of land with respect to its erosion potential and ability to withstand seismic activity.

**Stock.** Term generally referring to cattle, as in livestock.

**Stockpile.** An accumulation of ore, stone, or other mined or quarried material, which provides a steady source of supply for the processing plant.

**Storativity.** The volume of water that is either stored or discharged from a saturated aquifer per unit surface area per unit change in head.

**Stratification.** The layered structure of sedimentary rocks.

**Sub-grade.** Underlying surface upon which facilities such as leach pads, rock stockpiles, roads, etc. are constructed.

**Submergent Plant.** A plant growing in water. The entire plant remains below the surface of the water.

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**Substation.** A facility in an electrical transmission system with the capacity to route control electrical power and to transform power to a higher or lower voltage.

**Surfactant.** A chemical that modifies the surface tension of a liquid, changing the way bubbles form and burst.

**Surge Pile.** Stockpile used to temporarily store excess crushed ore.

**Tailings.** The remains of milled ore that are regarded as too poor to be treated further.

**Texture.** The visual manifestations of the interplay of light and shadow created by the variations in the surface of an object or landscape.

**Threatened Species.** Any species of plant or animal that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

**Total Dissolved Solids (TDS).** Total amount of dissolved material, organic or inorganic, contained in a sample of water.

**Total Suspended Solids (TSS).** Amount of undissolved particles suspended in liquid.

**Traditional Cultural Property (TCP).** A physical property that may be eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community.

**Transmissivity.** The amount of water that can flow horizontally through the entire saturated thickness of the aquifer under a hydraulic gradient of 1 m/m.

**Tuff.** General term for all consolidated pyroclastic rocks.

**Understory.** Lower-most vegetation layer of an area.

**Unmineralized.** Lacking economic mineral content.

**Unnecessary or Undue Degradation.** As defined at 43 CFR 3809.5, conditions, activities, or practices that (1) fail to comply with the performance standards in 3809.420, the terms and conditions of an approved plan of operations, operations described in a complete notice, and other federal and state laws related to environmental protection and protection of cultural resources; (2) are not reasonably incidental to prospecting, mining, or processing operations; (3) fail to attain a stated level of protection or reclamation required by specific laws in areas such as the California Desert Conservation Area, Wild and Scenic Rivers, BLM-administered portions of the National Wilderness System, and BLM-administered National Monuments and National Conservation Areas.

**Uplands.** Areas outside riparian zones.

**Valid Existing Rights.** Legal interests attached to land or mineral estate that cannot be divested from the estate until that interest expires or is relinquished.

**Visual Resource Management (VRM) Classes.** Classification containing specific objectives for management of visual resources, including the kinds of structures and modifications acceptable to meet established visual goals.

**Visual Resources.** The visible physical features on the landscape (land, water, vegetation, and structures); scenery.

**Volatile Organic Compounds (VOCs).** Organic compounds which participate in atmospheric photochemical reactions except for those designated by the EPA Administrator as having negligible photochemical reactivity.

**Waters of the U.S.** A term from Section 404 of the Clean Water Act referring to water bodies such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. The use, degradation, or destruction of these waters could affect interstate or foreign commerce and is under the jurisdiction of the U.S. Army Corps of Engineers.

**Watershed.** The geographic region from which water drains into a particular stream, river, or body of water. A watershed includes hills, lowlands, and the body of water into which the land drains. Watershed boundaries are defined by the ridges or divides separating them.

**Water Table.** The level in the saturated zone at which the pressure is equal to the atmospheric pressure.

**Wetlands.** Areas that are inundated by surface or ground water with a frequency sufficient to support (and under normal circumstances do or would support) a prevalence of vegetation or aquatic life that required saturated or seasonally saturated soil conditions for growth and reproduction.

**Wild and Scenic River.** A river designated under the authority of the National Wild and Scenic Rivers Act of 1968 to preserve the free-flowing character of the river and its outstandingly remarkable natural and cultural resource values.

**Wild and Scenic Rivers Act.** Act passed by Congress in 1968 to preserve in free-flowing condition and to protect for the benefit and enjoyment of present and future generations certain selected rivers of the Nation which possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values.

**Wilderness.** An area formally designated by Congress as part of the National Wilderness

Preservation System. A wilderness, in contrast with those areas where people and their works dominate the landscape, is recognized as an area where the earth and its community of life are untrammeled, where people visit but do not remain. It is an area of undeveloped land retaining its primeval character and influence, without permanent improvements or human habitation, that is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by forces of nature, with the imprint of human's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least 5,000 acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired conditions; and (4) may also contain ecologic, geologic, or other features of scientific, education, scenic, or historical value.

**Xeroriparian.** Riparian habitats generally associated with an ephemeral water supply. These communities typically contain plant species also found in upland habitats; however, these plants in xeroriparian habitats are typically larger and/or occur at higher densities than in adjacent uplands.

*Glossary*

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