9.0 GLOSSARY

A-Horizon

The surface layer of soil, or topsoil, generally characterized by the accumulation of organic material.

A-weighted

A weighting function applied to the noise spectrum, which approximates the response of the human ear.

Access (road)

Road used for passage to and along transmission line for purposes of construction and maintenance, or the road providing a means or entry to the power plant and associated facilities.

Advisory Council on Historic Preservation (ACHP)

An independent federal agency that provides a forum for influencing federal activities, programs, and policies as they affect historic resources. The ACHP was established by the National Historic Preservation Act in 1966, with the goal of having federal agencies as responsible stewards of our Nation's resources when their actions affect historic properties. The ACHP is the only entity with the legal responsibility to balance historic preservation concerns with federal project requirements.

Aesthetic Quality

A perception of the beauty of a natural or cultural landscape.

Affected Environment

A geographic area and the associated natural, human, and cultural resources that could be influenced by a proposed action. Also, the chapter in an environmental impact statement that describes the existing condition of the environment.

Aggradation

The process of sediment deposition by running water, as in the channel of a stream.

Aggregate

A mass or body of rock particles, mineral grains, or both.

Aggregation

The natural deposition of sediments in a river channel, gradually building up the slope or level of the riverbed.

Air Emissions

The release or discharge of a pollutant (from a stationary source) by an owner or operator into the ambient air either (1) by means of a stack or (2) as a fugitive dust, mist, or vapor as a result inherent to the manufacturing or formulating process.

Air Quality Standards

The level of pollutants prescribed by law or regulation that cannot be exceeded during a specified time in a defined area.

Air Quality Classifications

Classifications established under the Prevention of Significant Deterioration portion of the Clean Air Act that limit the amount of air pollution considered significant within an area. Class I applies to areas where almost any change in air quality would be significant, Class II applies to areas where the deterioration normally accompanying moderate well-controlled growth would be permitted, and Class III applies to areas where industrial deterioration would generally be allowed.

Alignment

The specific, surveyed route of a linear feature such as a transmission line or pipeline.

Allotment

A designated area of land available for livestock grazing upon which a specified number and kind of livestock may be grazed under management of an authorized agency.

Alluvial Basin

A structural trough filled with alluvium. An alluvial basin is typically bounded by fault-block mountain ranges.

Alluvial Fan Deposit

Unconsolidated to semi-consolidated sediment deposited during the formation of an alluvial fan. Alluvial fans form at the edges of mountain ranges where streams flow from the mountains onto the alluvial plain.

Alluvium (Alluvial Deposits)

A general term for clay, silt, sand, gravel, or similar consolidated material deposited during comparatively recent geologic time by a stream or other body of running water in the bed of the stream, river, or floodplain, or as a cone or fan at the base of a mountain slope.

Ambient (air)

That portion of the atmosphere, external to buildings, to which the general public has access.

Ampere (amp)

A unit of measure for an electrical current; the amount of current that flows in a circuit at an electromotive force of 1 volt and at a resistance of 1 ohm.

Anaerobic

A condition in which molecular oxygen is absent from the environment.

Animal Unit Month (AUM)

Acres of forage required to sustain a cow, cow/calf unit (one cow and one calf), or equivalent for one month.

Annual (botany)

A plant that lives and grows for only one year or season.

Anticline

A sharply arched fold of stratified rock composed of strata that slope downward in opposite directions from the apex of the arch.

Aquatic Animals

Animals that carry out respiration by means of a gill structure permitting gaseous exchange between the water and circulatory system.

Aquatic Flora

Plant life associated with the aquatic ecosystem, including, but not limited to, algae and higher plants.

Aquifer

A water-bearing layer of permeable rock, sand, or gravel. A formation, group of formations, or part of a formation that contains sufficient saturated permeable material to conduct groundwater and yield water to wells and springs.

Aquifer Boundary

At term that refers to the physical limit of an aquifer. Examples of aquifer boundaries include an area where an aquifer is exposed at the land surface, and an abrupt or gradational transition into an adjacent hydrogeologic unit.

Aquifer Test

A test performed to obtain data on the hydraulic characteristics and yield of an aquifer. An aquifer test is typically conducted by pumping a well at a constant rate for a specified period of time while monitoring the discharge rate and measuring water levels in the pumping well (see constant-discharge aquifer test). Water levels may also be measured in other nearby wells during the test. A constant-discharge aquifer test may be preceded by step-drawdown test (see definition).

Aquitard

A saturated hydrogeologic unit characterized by very low hydraulic conductivity. An aquitard is capable of transmitting groundwater at a very low flow rate.

Archaeology

The science that investigates the history of peoples by the remains belonging to the earlier periods of their existence.

Archaeological Site

Any locale showing evidence of human activity.

Archival

Pertaining to or contained in documents or records that preserve information about an event or individual.

Area of Critical Environmental Concern (ACEC)

A BLM designation for an area within public lands where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life from natural hazards.

Arkosic Gravel

Gravel composed predominantly of feldspar, and/or rock fragments containing an abundance of feldspar.

Arroyo

A term applied in the arid and semiarid regions of the southwestern United States to the small, deep, flat-floored channel or gully of an ephemeral stream or of an intermittent stream usually with vertical or steeply cut banks of unconsolidated material at least 2 feet high; it usually is dry, but may be transformed into a temporary watercourse or short-lived torrent after heavy rainfall.

Artesian Aquifer

An aquifer under confining (or artesian) pressure due to the presence of an overlying aquitard or other confining layer. Wells that penetrate artesian aquifers under sufficient confining pressure will produce groundwater that flows naturally out of the well.

Artifact

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

Background

That portion of the visual landscape lying from the outer limit of the middleground to infinity. Color and texture are subdued in this area, and visual sensitivity analysis here is primarily concerned with the two-dimensional shape of landforms against the sky.

Base Load

The load level at which a gas turbine is normally operated.

Baseload Plant

A power plant that generates enough kilowatt hours, for any 12-calendar-month period, to

exceed its design capacity multiplied by 3,500 hours.

Basin

A depression of the earth's surface, of tectonic origin, in which sediments have been deposited.

Basin-fill Sediment

Unconsolidated to semi-consolidated sediment deposited in an alluvial basin.

Basin and Range Province

Topographic and physiographic province or landscape characterized by a series of tilted fault block mountains and broad intervening basins.

Bedrock

A general term for solid rock that lies beneath soil, loose sediments, or other unconsolidated material.

Best Management Practice (BMP)

Methods determined to be the most effective, practical means of preventing or reducing pollution.

Biological Assessment

A document prepared, usually in conjunction with an environmental impact statement, that analyzes the specific impacts of a project on any species listed as threatened or endangered under the Endangered Species Act, that may occur in a project area or be affected by a proposed action. The Biological Assessment (BA) is a requirement of the Section 7 (Section 7(a)2 of the Endangered Species Act) consultation between a federal agency and the U.S. Fish and Wildlife Agency (USFWS). USFWS uses the information in a BA to render an opinion as to whether the proposed project will jeopardize the continued existence of any listed species. USFWS may suggest or require adjustments to the proposed action to avoid adverse impact or jeopardizing the existence of a species.

Blowdown Water

The minimum discharge of recirculating water for the purpose of discharging materials contained in the process, the further buildup of which would cause concentrations or amounts exceeding limits established by best engineering practices.

British Thermal Unit (BTU)

The amount of heat required to raise the temperature of 1 pound of water 1 degree Fahrenheit.

Burning Agents

Those materials that, through physical or chemical means, improve the combustibility of the materials to which they are applied.

Caliche

Cemented deposit of secondary calcium carbonate found in layers or disseminated throughout the horizon of certain soils in arid to semiarid regions.

Cambrian

The earliest geologic period in the Paleozoic Era, spanning the time of 570 to 500 million years ago, and marked by a profusion of marine animals.

Candidate Species

A plant or animal species not yet officially listed as threatened or endangered; however currently undergoing status review by USFWS.

Capacity

The maximum load that can be generated or transmitted by a generating or transmission facility for a given period of time without exceeding approved limits of temperature or stress.

Carbon Monoxide (CO)

A colorless, odorless, poisonous gas, produced by incomplete combustion of carbon-based fuels including gasoline, oil, and wood.

Centerline

A line along the approximate middle of the right-of-way of a linear feature such as a transmission line or pipeline.

Chroma

The relative purity or saturation of a color; intensity of distinctive hue as related to grayness; one of the three variables of color.

Clean Water Act

Section 404 of this Act identifies conditions under which a permit is required for construction projects that result in the discharge of fill or dredged material into, or dredging of materials from, waters of the United States. Section 402 of this Act identifies conditions under which a permit is required for the discharge of pollutants into waters of the United States.

Combined Cycle

A power plant operational system that uses a combination of one or more combustion turbine units and one or more steam turbine units to generate electricity, with a substantial portion of the required energy input of the steam turbine unit(s) provided by the exhaust gas from the combustion turbine unit(s).

Combustion

The production of heat and light energy through a chemical process, usually oxidation. One of the three basic contribution processes of air pollution, the others being attrition and vaporization.

Combustion Turbine

A machine that has propeller-like blades that are moved by combustion gases to spin a rotor in a generator to produce electricity.

Confined Aquifer

An aquifer bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer itself; an aquifer containing confined groundwater.

Cooling Tower

A structure used to cool water. Water is pumped to the top of the tower, sprayed into the tower, and is cooled by evaporation. The water is then either recycled within the tower or discharged.

Conductor

The wire cable strung between transmission line towers through which the electrical current flows.

Conglomerate

A type of sedimentary rock consisting predominantly of cemented cobble- and gravel-sized particles, and that may also include sand and finer-grained particles.

Constant-Discharge Test

A type of aquifer test performed by pumping a well at a constant rate for a specified period of time while monitoring the discharge rate and measuring water levels in the pumping well. A constant-discharge test is typically performed to obtain data on the hydraulic characteristics and yield of an aquifer.

Constant-Head Boundary

A groundwater modeling term that refers to a type of boundary within a model wherein the head, or water level, within a cell is held constant. Constant-head boundaries are typically used to simulate groundwater flow into

the model domain, or the effect of a perennial stream hydraulically connected to an aquifer.

Construction, Operation and Maintenance Plan (COMP)

A detailed plan depicting engineering, access, construction, environmental, and reclamation that is prepared prior to construction and operation of a proposed action.

Corona

The electrical breakdown of air into charged particles caused by the electric field at the surface of transmission line conductors. Effects of corona are audible noise, radio and television interference, visible light, and photochemical oxidants.

Corridor

A continuous strip of land of defined width, through which a linear utility route (or routes) passes.

Council on Environmental Quality (CEQ)

An advisory council to the President of the United States established by the National Environmental Policy Act of 1969. It reviews Federal programs for their effort on the environment studies, and advises the President on environmental matters.

Cretaceous

The third and latest period of the Mesozoic Era, spanning in time from 136 to 65 million years ago, marked by the dying out of toothed birds and dinosaurs, and the development of early mammals.

Critical Habitat

As defined under the Endangered Species Act, critical habitat exists only after U.S. Fish and Wildlife Service officially designates it. Critical habitat are areas (1) within the geographic area occupied by a species at the time it is listed on which are found those physical or biological features essential to the conservation of the species and that may require special management consideration or protection; and (2) those specific areas outside the geographic area occupied by a species at the time it is listed essential to the conservation of the species.

Cultural Resources

Remains of human activity, occupation, or endeavor, as reflected in districts, sites, buildings, objects, artifacts, ruins, works of art, architecture, and natural features important in human events.

Cumulative Impact

The impact on the environment that 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 (40 CFR 1508.7).

Decibel (dB)

A measure of intensity, which defines a sound’s loudness.

Degradation

The wearing down or away, and general lowering or reduction, of the earth's surface by the processes of weathering and erosion.

Demineralizer

A piece of equipment that removes dissolved minerals from water.

Devonian

A geologic period during the Paleozoic Era, spanning in time from 395 to 345 million years ago, marked by an abundance of fishes and the appearance of the first land plants and amphibians.

Directional Drilling

The technique of drilling at an angle from the vertical by deflecting the drill bit. Directional wells often are drilled to reach an oil- or gas-bearing reservoir where conventional drilling cannot be performed.

Distance Zone

A visibility threshold distance where visual perception changes. The zones are usually defined as foreground, middleground and background.

Diversity

The relative abundance of wildlife species, plant species, communities, habitats, or habitat features per unit of area.

Drainage Basin

The region or area bounded peripherally by a drainage divide or occupied by a river system.

Drawdown

The lowering of the water table of an unconfined aquifer or the potentiometric surface of a confined aquifer by pumping of groundwater from wells.

Ecology

The study of the relationships between living organisms and their environment.

Ecosystem

A complex system composed of a community of plants and animals, and that system's chemical and physical environment.

Ecotone

A transitional zone between two adjacent ecological communities.

Electric and Magnetic Field (EMF)

A space or region within which magnetic forces are present around an electrical current.

Electrostatic Field

Pertaining to a space or region within which atmospheric electricity at rest interferes with radar, radio or television reception.

Emergent (vegetation)

Vegetation with all or part of their vegetative and reproductive parts above the water.

Emission

Pollution discharged into the atmosphere from a source.

Endangered Species

Any plant or animal species in danger of extinction throughout all or a significant portion of its range as defined by the Endangered Species Act of 1973.

Endangered Species Act of 1973 (ESA)

Section 7 of the ESA requires federal agencies to consult with the U.S. Fish and Wildlife Service to ensure that undertaking, funding, permitting, or authorizing an action is not likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat.

Endemic

Plants or animals that are native to a particular region or country.

Environment

The surrounding conditions, influences or forces that affect or modify an organism or an ecological community and ultimately determine its form and survival.

Environmental Assessment

An evaluation of existing resources and potential impacts on them from a proposed action or change to the environment.

Environmental Impact Statement (EIS)

A formal public document prepared to analyze the impacts on the environment of the proposed project or action and released for comment and review. An EIS must meet the requirements of NEPA, CEQ guidelines, and directives of the agency responsible for the proposed project or action.

- ### Draft EIS

  The document prepared by a Federal agency or department or under Federal guidance that attempts to identify and analyze the environmental impacts of a proposed action and feasible alternatives.

- ### Final EIS

  The Draft EIS is circulated for public comments that are addressed in the Final EIS.

Environmental Justice (Executive Order 12898)

Ensures that all people, regardless of race, national origin, or income, are protected from disproportionate impacts of environmental actions.

Eolian

Sediment carried, formed, or deposited by the wind, as sand dunes.

Ephemeral Stream

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

Erosion

The wearing away of land surface by wind or water. Erosion occurs naturally from weather or runoff but can be intensified by land-clearing practices.

Ethnography

That aspect of cultural and social anthropology devoted to the first-hand description of particular cultures.

Evaporation Pond

A pond designed to receive and store discharged process wastewater, cooling tower blowdown water, and stormwater from a power plant, while it evaporates into the atmosphere.

Evapotranspiration

The return of water to the atmosphere through the combined effects of evaporation and plant transpiration.

Fault

A fracture or fracture zone in the earth's surface along which there has been displacement of the sides relative to one another parallel to the fracture.

Fauna

Animals collectively, especially the animals of a specified region or time.

Federal Energy Regulatory Commission (FERC)

Agency primarily responsible for ensuring adequate energy supplies at just and reasonable rates and providing regulatory incentives for increased productivity, efficiency, and competition.

Federal Land Policy and Management Act of 1976 (FLPMA)

Established public land policy for management lands administered by the Bureau of Land Management (BLM). FLPMA specifies several key directions for the BLM, notably (1) management on the basis of multiple-use and sustained yield, (2) land use plans prepared to guide management actions, (3) public lands for the protection, development, and enhancement of resources, (4) public lands retained in Federal ownership, and (5) public participation used in reaching management decisions.

Field Effect

Induced currents and voltages, as well as related effects that might occur as a result of EMF at ground level.

Finite-Difference Groundwater Flow Model

A type of numerical groundwater flow model that consists of a rectilinear model grid configured to represent an aquifer or aquifer system. Each cell within the model grid represents a small portion of an aquifer with prescribed physical dimensions and hydraulic properties. Finite-difference models may be either two-dimensional or three-dimensional, depending on the complexity of the problem to be solved.

Firm Energy

Noninterruptible energy and power guaranteed by the supplier to be available at all times except for reasons of uncontrollable forces or continuity of service provisions.

Floodplain

That portion of a river or stream valley, adjacent to the river channel, which is built of sediments and is inundated with water when the stream overflows its banks.

Floodplain Deposit

A sedimentary deposit formed on the floodplain of a river or stream.

Foliage

The leaves of a growing plant or tree.

Forage

All browse and herbaceous foods available to grazing animals, which may be grazed or harvested for feeding.

Foreground

The visible area from a viewpoint or use area out to a distance of one-half mile. The ability to perceive detail in a landscape is greatest in this zone.

Foreground/Middleground

The area visible from a travel route, residence or other use area to a distance of 3 to 5 miles. The outer boundary of this zone is defined as the point where texture and form of individual plants are no longer apparent in the landscape. Vegetation is apparent only in patterns or outline.

Fossil

The remains or traces of an organism or assemblage of organisms that have been preserved by natural processes in the earth's crust; exclusive of organisms that have been buried since the beginning of historical time.

Fugitive Dust

Airborne solid particulate matter emitted from any source other than through a stack or vent.

General-Head Boundary

A groundwater modeling term that refers to a type of boundary within a model wherein the head, or water level, within a cell is allowed to fluctuate within a prescribed range.

Generic Mitigation

Measures, techniques, or practices applied/used generally to reduce adverse impacts on a non-specific basis.

Genus

One of the major taxonomic groups used to scientifically classify plants or animals: several closely related species, or one species, make up one genus, while several genera, or one genus, make up a family.

Geologic Formation

A rock unit distinguished from adjacent deposits by some common character, such as its composition, origin, or the type of fossil associated with the unit.

Geology

The study of the planet earth, the rocks of which it is composed, and the processes that have acted on these materials since its origin.

Granitic Rock

Rock composed of granite and/or igneous rock similar in composition to granite. Granite is an intrusive igneous rock composed primarily of feldspar and quartz.

Grazing Potential

The potential of an area to support livestock grazing measured by the number of acres of land required to support one animal unit (AUM) for a month.

Groundwater

Water below the earth's surface that flows or seeps downward and saturates soil or rock, supplying springs and wells. The area where water fills fractures and spaces in soil, sand, or rocks is called the saturated zone. The top of this zone is called the water table. Groundwater is stored in, and moves slowly through, layers of soil, sand, and rocks called aquifers.

Groundwater Flow Model

A computer model designed to simulate the configuration and hydraulic properties of an aquifer or aquifer system (see also definition of finite-difference groundwater flow model). After a computer model has been developed, it is typically used to predict the effects of pumping or other stresses on an aquifer.

Groundwater Underflow

The natural movement of groundwater from a groundwater basin into an adjacent basin.

Habitat

The region where a plant or animal naturally grows or lives. A specific set of physical conditions that surround a single species, a group of species, or a large community. In wildlife management, the major components of habitat are considered to be food, water, cover, and home range.

Hazardous Materials

Materials determined to be physical or chemical health hazards based on statistically significant evidence.

Heat Recovery System Generator

A system that uses the heat available in the combustion turbine exhaust gas to produce steam for the steam turbine in a combined-cycle operation.

Herbaceous

Of, or having the nature of, an herb or herbs as distinguished from woody plants.

Herbivore

An animal that feeds only on plants.

Hertz

A measure of frequency, which defines a sound's pitch.

Historic Preservation

The preservation of historic districts, sites, buildings, structures, and objects.

Holocene

The second geologic epoch of the Quaternary period, commencing with the end of the last glacial period (the Pleistocene epoch). This era was marked by the establishment of modern climatic and environmental conditions, and spans from roughly 9,000 BC to present.

Homogenous

Having similarity in structure because of similarity in descent.

Hydraulic Conductivity

A hydraulic property of an aquifer that describes the rate groundwater can flow through a unit area of the aquifer under a hydraulic gradient of 1:1.

Hydraulic Connection

Two hydrogeologic units are considered to be hydraulically connected if they are adjacent to one another, both are saturated with groundwater, and groundwater can move from one unit to the other.

Hydraulic Gradient

Change in elevation of the groundwater table with distance. The hydraulic gradient is used in conjunction with hydraulic conductivity to define the rate and direction of groundwater flow through an aquifer.

Hydraulic Properties

A general term that refers to the ability of an aquifer to store, transmit, and yield groundwater. Aquifer storage is typically expressed as the storage coefficient, or storativity. The ability of an aquifer to transmit water is usually expressed as hydraulic conductivity or transmissivity.

Aquifer yield typically refers to the sustainable pumping rate of a well completed in an aquifer.

Hydric Soil

A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation.

Hydrogeologic Unit

A geologic formation, or part of a formation, with similar hydrologic characteristics.

Hydrologic System

The distribution of surface and underground waters.

Hydrology

The science that relates to properties, distribution, and circulation of water.

Hydrophytic Vegetation

Plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content; plants typically found in wetlands and other aquatic habitats.

Igneous Rock

Rocks solidified from molten magma occurring as intrusives or extrusives (volcanics), at or below the surface of the earth.

Impact

A modification in the status of the environment brought about by a proposed action.

- #### Direct Impacts

  Caused by the action and occur at the same time and place (40 CFR 1508.8(a)).

- Indirect Impacts

  Caused by the action later in time or farther removed in distance, but 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.

Indicator Species

Species of fish, wildlife, or plants that reflect ecological changes caused by land management activities.

Infrastructure

The basic facilities on which a community depends, such as schools, power plants, or transportation and communication systems.

Insectivore

An animal that feeds chiefly on insects.

Intermittent

A river or stream that flows for a period of time, usually seasonally during rainy periods, and, stops during dry periods. In arid regions, dry periods may be interrupted by occasional flash floods from brief but intense rain storms.

Intrusive Igneous Rock

Rock formed by magma forced into or between other rocks while in a molten state.

Jurassic

The second period of the Mesozoic Era, spanning in time from about 190 to 136 million years ago, characterized by the dominance of dinosaurs and the appearance of flying reptiles and birds.

Jurisdictions

The limits or territory within which authority may be exercised.

Kilovolt (kV)

1,000 volts (a volt is a measure of electrical potential difference which would cause a current of 1 ampere to flow through a conductor whose resistance is 1 ohm).

Kilovolts Per Meter (kV/m)

A unit measure of electric field strength.

Kilowatt (kW)

A unit of power equivalent to 1,000 watts.

Kilowatt Hour (kW/h)

A power demand of 1,000 watts for one hour. Power company utility rates typically are expressed in cents per kW/h.

Lacustrine Deposit

A sedimentary deposit formed in and around the margins of a lake.

Landform

A term used to describe the many types of land surfaces that exist as a result of geologic activity and weathering (e.g., plateaus, mountains, plains, and valleys).

Landscape Character Type

The arrangement of a particular landscape as formed by the variety and intensity of the landscape features and the four basic elements of form, line, color, and texture. These factors give the area a distinct quality that distinguishes it from immediate surroundings.

Level of Service (LOS)

In transportation studies, a qualitative measure of traffic flow along a given road considering a

variety of factors, including speed and travel time, traffic interruptions, and freedom to maneuver LOSs are designated "A" through "F"; "A" being a free-flow condition with low volumes at high speeds and "F" being a congested condition of low speeds and stop-and-go traffic. Intermediate levels describe conditions between these extremes. A LOS below "C" involves unstable to forced traffic flow in which a driver's freedom to select a speed is restricted and in which traffic stoppages cause congestion.

Lithology

A term that refers to the composition of a rock formation. The study of rocks with the unaided eye, or with little magnification.

Load

The demand on an energy producing system; the energy consumption or requirement of a piece of equipment.

Loam

A rich, permeable soil composed of clay, silt, sand, and organic matter.

Macroinvertebrate

Animals without backbones that are visible without a microscope; insects.

Maximum Contaminant Level (MCL)

The designation given by the U.S. Environmental Protection Agency to water-quality standards promulgated under the Safe Drinking Water Act. The MCL is the greatest amount of a contaminant that can be present in drinking water without causing a risk to human health.

Megawatts (MW)

1,000 kilowatts or 1 million watts (a watt is a unit of electrical power equal to 1/756th horsepower).

Merchant Plant

A power plant that operates without long-term power contracts for the purpose of selling power on the wholesale electric market.

Mesa

An isolated, nearly level land mass, formed of nearly horizontal rocks, standing above the surrounding country and bounded with steep sides.

Metamorphic Rock

Rock that has been formed through metamorphism. Metamorphism is the change in the mineralogical, structural, or textural composition of rocks under intense heat and pressure (e.g., turning limestone into marble).

Migratory

Birds, animals, or people that migrate, or move from one region or country to another.

Mineral Resources

Any inorganic or organic substance occurring naturally in the earth that has a consistent and distinctive set of physical properties. Examples of mineral resources include coal, nickel, gold, silver, and copper.

Mississippian

A period of the Paleozoic Era, spanning in time from about 345 to 320 million years ago.

Mitigation

Actions to avoid, minimize, reduce, eliminate, replace, or rectify the impact of a management practice.

Monocline

A rock fold or strata that slope in one direction.

Mudstone

A hardened sedimentary rock consisting of clay that is similar to shale, but does not occur in distinct, bonded layers.

National Ambient Air Quality Standards (NAAQS)

The allowable concentrations of air pollutants in the air specified by the federal government. The NAAQS are divided into primary standards (based on the air quality criteria and allowing an adequate margin of safety and requisite to protect the public health) and secondary standards (based on the air quality criteria and allowing an adequate margin of safety and requisite to protect the public welfare) from any unknown or expected adverse effects of air pollutants.

National Environmental Policy Act of 1969 (NEPA)

Public Law 91-190. Establishes environmental policy for the nation. Among other items, NEPA requires Federal agencies to consider environmental values in decision-making processes.

National Historic Preservation Act of 1966 (NHPA)

Federal undertakings must comply with Section 106 of NHPA, which mandates that potential effects on significant historic properties be considered prior to approval of such undertakings. Significant historic properties are defined as sites, districts, buildings, structures, and objects eligible for the National Register of Historic Places. Consideration of these resources is to be made in consultation with the State Historic Preservation Officer and other interested agencies and parties.

National Register of Historic Places

A listing of architectural, historical, archaeological, and cultural sites of local, state, or national significance, established by the National Historic Preservation Act of 1966 and maintained by the National Park Service.

Native Vegetation

Vegetation naturally originating in a certain region or country.

Natural Gas

A mixture of gaseous hydrocarbons, composed primarily of methane, occurring naturally in the earth, often among petroleum deposits, that is used as a fuel.

Natural Gas Supply

The means by which the power plant receives natural gas that is converted into heat energy, which in turn is converted into mechanical and then electrical energy.

Nitrogen Oxides (NO_x)

Smog formers, produced from burning fuels including gasoline and coal, that react with volatile organic compounds to form smog. NO_x also are major components of acid rain.

No-Flow Boundary

A groundwater modeling term that refers to a type of boundary within a model that prevents the flow of water from one model cell to an adjacent cell. A no-flow boundary is typically used to simulate the physical limit of an aquifer (see definition of aquifer boundary).

Noise

Loud, unpleasant, unexpected, or undesired sound that disrupts or interferes with normal human activities.

Off-Highway Vehicle (OHV)

Any motorized vehicle capable of or designed for travel on or immediately over natural terrain. OHV use includes driving off a designated road for purposes including, but not limited to

recreation, ranching, mineral operations, hunting, fuelwood gathering, etc.

Ohm

A measure of the electrical resistance of a material equal to the resistance of a circuit in which the potential difference of 1 volt produces a current of 1 ampere.

One-hundred-year Flood

A flood with a probability to occur once every one hundred years or a 1-in-100 chance of a flood occurring in a given year.

Oxidized Rhizospheres

Oxidized channels and soil surrounding living roots and rhizomes of hydrophytic plants.

Ozone

Ozone (O_3) – A bluish, toxic gas with a pungent odor formed by three oxygen atoms rather than the usual two. Ozone occurs in the stratosphere and plays a role in filtering out ultraviolet radiation from the sun's rays. At ground level ozone is a major component of smog.

Paleontology

The science of life in past geological time based on fossilized plants and animals.

Paleozoic

The geologic era between the Precambrian and Mesozoic eras covering the time between 570 million and 225 million years ago. The era was characterized by the development of the first fishes, amphibians, reptiles, and land plants.

Panoramic

An unlimited view in all directions.

Parent Material

The rock formation that a soil originated from through chemical and physical processes.

Particulate Matter (PM)

Tiny bits of solid material such as dust and soot released into and move around in the air. Particulates are produced by many sources, including burning of diesel fuels by trucks and buses, incineration of garbage , mixing and application of fertilizers and pesticides, road construction, industrial processes such as steel making, mining operations, agricultural burning (field and slash burning), and operation of fireplaces and woodstoves. Particulate pollution can cause eye, nose, and throat irritation and other health problems.

Parts Per Million

The number of "parts" by weight of a substance per million parts of water. This unit commonly is used to represent pollutant concentrations. It is approximately equal to 1 milligram per liter.

Pennsylvanian

A period of the Paleozoic Era, spanning from about 320 to 280 million years ago.

Perennial Stream

A stream or portion of a stream that flows throughout the year.

Permeability

The measure of the ease with which a fluid can diffuse through a particular porous material.

Permian

The seventh and last period of the Paleozoic Era, spanning from about 280 to 225 million years ago, characterized by increased reptile life and major mountain building in North America.

Petroglyph/Pictograph

A generally prehistoric symbolic design or drawing of an animal, human, or geometric or abstract image pecked or carved into a rock or cliff face.

pH

A measure of the relative acidity or alkalinity of water. Water with a pH of 7 is neutral; lower pH levels indicate increasing acidity, while pH levels higher than 7 indicate increasingly basic solutions.

Physiographic Province

An area characterized by distinctive topography, geologic structure, climate, drainage patterns, and other features and phenomena of nature.

Pipeline

A line of pipe equipped with pumps and valves and other control devices for moving liquids, gases, and slurries (fine particles suspended in liquid).

Pithouse

A prehistoric dwelling partially constructed beneath the earth's surface.

Plateau

An elevated tract of relatively level land, such as a tableland or mesa.

Playa

The shallow central basin of a desert plain, in which water gathers after a rain and is evaporated.

Pleistocene

The first geologic epoch during the Quaternary period, spanning from 1.8 million years ago to about 9000 BC, characterized by extensive continental glaciation in the Northern Hemisphere.

PM_{10}

Coarse particulate matter less than 10 micrometers in diameter that generally are emitted from sources such as vehicles traveling on unpaved roads, materials handling, and crushing and grinding operations, as well as wind blown dust.

Policy

A guiding principle upon which is based a specific decision or set of decisions.

Power Plant

A stationary electric generating unit consisting of a boiler, a gas turbine, or a combined-cycle unit that employs a generator to produce electric power for purposes of sale or exchange and has the design capability of consuming any fuel (or mixture thereof) at a fuel heat input rate of 100 BTUs per hour or greater.

Precambrian

The earliest geologic era covering all time from the formation of the earth and ending at the Paleozoic Era which began about 570 million years ago.

Prey

An animal hunted or killed for food by another animal.

Primitive

Of or pertaining to an earliest or original stage or state.

Proposed Action

Construction activities, facilities, routes, and other activities proposed by the applicant.

Protective Withdrawal

Lands that have been withdrawn from availability under the various land and mining laws for administrative or protective reasons (e.g., recreation sites, office, or warehouse sites).

Public Involvement

The opportunity for participation by affected citizens in rulemaking, decisionmaking, and

planning with respect to public lands, including public meetings or hearings held at locations near the affected lands, or advisory mechanisms, or other such procedures as may be necessary to provide public comment.

Pumping Test

A test made by pumping a well for a period of time and observing the change in hydraulic head in the aquifer. A pumping test may be used to determine the capacity of a well and the hydraulic characteristics of the aquifer.

Purpose and Need

A statement that generally reflects what the applicant (or proponent) intends to accomplish by the proposed action.

Quaternary

The geologic period following the Tertiary in the Cenozoic Era, beginning about 1.8 million years ago, composed by the Pleistocene and Holocene epochs, characterized by the evolution of Hominids into modern humans.

Range

A large, open area of land over which livestock can roam and graze.

Raptor

A bird of prey with sharp talons and a strongly curved peak (e.g., hawk, owl, vulture, eagle).

Reclamation

Returning disturbed lands to a form and productivity that will be ecologically balanced.

Reconnaissance

Preliminary examination or survey of a land area.

Recontouring

Returning a surface to or near to its original form through some type of action such as grading.

Record of Decision (ROD)

A document separate from, but associated with, an environmental impact statement that publicly and officially discloses the responsible official's decision on the proposed action.

Recovery

The rise in water level in a pumping well and nearby observation wells after groundwater pumping has ceased.

Reference Centerline

For purposes of assessing impacts and recommending mitigation, a centerline is assigned that may be slightly adjusted during engineering design.

Region

A large tract of land generally recognized as having similar character types and physiographic types.

Residual Impact

The resulting impact of an action remaining after application of mitigation.

Revegetation

The reestablishment and development of self-sustaining plant cover. On disturbed sites, this normally requires human assistance such as reseeding.

Right-of-way

Strip of land acquired by legal means, over which the power line and access roads would pass.

Riparian

An aquatic or terrestrial ecosystem that is associated with bodies of water, such as streams, lakes, or wetlands, or is dependent upon the existence of perennial, intermittent, or ephemeral surface or subsurface water drainage.

Route

The general path of a linear feature such as a transmission line or pipeline and associated facilities.

Runoff

The total amount of water flowing in a stream. It includes overland flow, return flow, interflow, and base flow.

Sandstone

A sedimentary rock composed primarily of sand grains, mainly quartz, that are cemented together by other minerals.

Scenic Quality Class

A BLM designation (A, B, or C) assigned a scenic quality rating unit to indicate the visual importance or quality of a unit relative to other units within the same physiographic province.

Scenic Quality Rating Unit (SQRU)

A portion of the landscape that displays primarily homogeneous visual characteristics of the basis landscape features (landform, water, vegetation, and structures and modifications) which separate it from the surrounding landscape.

Scope

The range of actions, alternatives, and impacts to be considered in an environmental impact statement.

Scoping

A term used to identify the process for determining the scope of issues related to a proposed action and for identifying significant issues to be addressed in an environmental impact statement.

Sediment

Solid fragmental material, either mineral or organic, that is transported or deposited by air, water, gravity, or ice.

Seismicity

The likelihood of an area being subject to earthquakes. The phenomenon of earth movements.

Selective Mitigation

Measures or techniques developed to reduce adverse impact on a case-by-case, or selective, basis.

Semi-arid

A climate or region characterized by little yearly rainfall and by the growth of a number of short grasses and shrubs.

Sensitivity

The state of being readily affected by the actions of external influence.

Sensitive Species

Those species for which population viability is a concern as evidenced by significant current or predicted downward trends in (1) population numbers or densities, or (2) habitat capability that would reduce a species' existing distribution.

Significance Criteria

Criteria identified to determine whether or not impacts on specific resources would be significant.

Significance

The importance or weight of an impact as determined by its context and intensity, or severity.

Simulations

The use of a computer to calculate the effect of a given physical process.

Slope

The degree of deviation of a surface from the horizontal.

Soil Series

A group of soils having genetic horizons (layers) that, except for texture of the surface layer, have similar characteristics and arrangement in profile.

Solid Waste

Non liquid, non-soluble materials ranging from municipal garbage to industrial wastes that contain complex and sometimes hazardous substances. Solid wastes also include sewage sludge, agricultural refuse, demolition wastes, and mining residues. Technically, solid waste also refers to liquids and gases in containers.

Species of Concern

An informal term that refers to species the U.S. Fish and Wildlife Services believes might be in need of concentrated conservation actions. Species of concern receive no legal protection and the use of the term does not necessarily mean that the species will eventually be proposed for listing as a threatened or endangered species.

Spill Prevention, Containment, and Countermeasures Plan

A plan developed and implemented by onshore facilities that includes physical structures and other measures to respond to and prevent spills of oil or hazardous substances from reaching navigable waters.

Spring

A location where ground water flows naturally onto the land surface.

Stable Isotope

Atoms of an element that vary from one another only in the number of protons are referred to as isotopes of that element. Stable isotopes are isotopes that do not undergo radioactive decay. The most common stable isotopes are isotopes of oxygen and hydrogen.

Steam Turbine

A machine that has propeller-like blades that can be moved by steam to spin a rotor in a generator to produce electricity.

Step-Drawdown Test

A type of aquifer test performed by pumping a well at a several sequential rates to assess well efficiency and/or select the optimum pumping rate for a constant-discharge test.

Storage Coefficient

A hydraulic property of an aquifer that describes the amount of water released from storage during pumping.

Stormwater

Water from precipitation that flows across the ground and pavement when it rains or when snow and ice melt. Collectively, the draining water is called stormwater runoff.

Stormwater Pollution Prevention Plan

A plan developed under the Clean Water Act that discusses measures taken to prevent the release of pollutants from stormwater runoff.

Strata

Plural of stratum. Horizontal layer of sedimentary rock.

Stream Channel Deposit

A sedimentary deposit formed in a stream channel.

Subspecies

Any natural subdivision of a species that exhibits small, but persistent morphological variations from other subdivisions of the same species living in different geographical regions or times.

Substation

An assemblage of equipment, enclosed by fence, occurring at points along a transmission line. A facility in an electrical transmission system with the capability to route and control electrical power, and to transform power to a higher or lower voltage. Equipment includes transformers, circuit breakers, and other equipment for switching, changing, or regulating the voltage of electricity.

Surface Water

Water that flows exclusively across the surface of the land from the point of application to the point of discharge.

Tertiary

The first period in the Cenozoic Era, spanning from 65 to 1.8 million years ago.

Threatened Species

Any species likely to become endangered within the foreseeable future throughout all or a significant part of its range.

Total Dissolved Solids (TDS)

A term that describes the quantity of dissolved minerals and salts in water.

Traditional Cultural Resource

A historic resource that is significant 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.

Transition Zone

The area between two discrete environmental areas, and thus containing elements of each. For example, the transition zone between an upland pinon forest and a lowland desert scrub environment.

Transmission Line

An electrical conductor/cable that carries high-voltage electricity from a generator to other locations for distribution.

Transmissivity

A hydraulic property of an aquifer that describes the rate of flow of groundwater through a unit width of the saturated thickness of the aquifer under a hydraulic gradient of 1:1.

Triassic

The first period in the Mesozoic Era, spanning from 225 to 190 million years ago and following the Permian Period of the Paleozoic Era; characterized by the appearance of many reptiles, including the dinosaurs.

Tributary

A stream or river that flows into a larger body of water.

Turning Dead-end Structure

A transmission line tower structure that is more robust than a typical structure, used (1) to add longitudinal strength to the line, (2) at turning points (angles), (3) for added safety at crossings of other utilities such as other transmission liens and roads, and (4) to interrupt long distances of

suspension structures that would otherwise provide more exposure to catastrophic line failure over long distance.

Two-Track

A 10-foot-wide travelway periodically used by vehicles.

Uranium

A very heavy, silvery, metallic element that is crucial to the research and development of atomic energy.

Utility Corridor

A route designated for use by utilities for locating pipelines, cables, and transmission lines.

Variety Class

A designation (A, B, or C) assigned to a homogeneous area of the landscape to indicate the visual importance or quality relative to other landscape areas within the same physiographic province (USFWS designation).

Vegetation Communities

Species of plants that commonly live together in the same region or ecotone.

Vegetation Type

A plant community with distinguishable characteristics described by the dominant vegetation present.

Viewshed

Visible portion of the specific landscape seen from a specific viewpoint, normally limited by landform, vegetation, distance and existing cultural modifications.

Visual Contrast

The effect of a striking difference in the form, line, color or texture of an area being viewed.

Visual Contrast Rating

A method of determining the extent of visual impact for an existing or proposed activity that would modify any landscape feature (land and water form, vegetation and structures).

Visual Management Objectives

The term used in this study to generally define VRM (BLM) or VQO classes (Forest Service).

Visual Management System

System of land management based upon meeting visual resource goals (Forest Service).

Visual Resource Management (VRM) classes

Classification of landscapes according to the kinds of structures and changes that are acceptable to meet established visual goals (BLM).

Visual Resources

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

Visual Sensitivity Levels

The index of the relative degree of user interest in scenic quality and concern for existing or proposed changes in the landscape features of that area in relation to other areas in the study area.

Visual Quality Objectives

Classification of landscape areas according to the types of structures and changes that are acceptable to meet established visual goals (Forest Service designation).

Volatile Organic Compounds (VOCs)

Compounds including organic chemicals (containing carbon), which are the basic chemicals found in lining things and in products

derived from living things, such as coal, petroleum, and refined petroleum products and volatile chemicals, which produce vapors readily. VOCs include gasoline, industrial chemicals, and solvents. Many VOCs also are hazardous air pollutants.

Volcanic Rock

Rock formed from the extrusion of magma onto or near the earth's surface. Also referred to as extrusive igneous rock.

Volt

A unit of electrical force equal to that amount of electromotive force that will cause a steady current of 1 ampere to flow through a resistance of 1 ohm.

Voltage

The amount of electromotive force, measured in volts, that exists between two points.

Wall Boundary

A groundwater modeling term that refers to a type of boundary within a model that simulates the lateral limit of an aquifer, and prevents the flow of water from one model cell to an adjacent cell. A wall boundary is a type of no-flow boundary (see definition of no-flow boundary).

Wash

An intermittent stream channel.

Waste Management

The handling, storage, and disposal of unwanted materials.

Wastewater

Water containing dissolved or suspended solids that has been used in homes, industries, and businesses that is not for reuse unless it is treated.

Water Level Drawdown

The decline in elevation of the groundwater table, or the water level in a well, due to natural causes (such as decreased precipitation or an increase in riparian vegetation) or groundwater pumping.

Water Level Recovery

The rise in elevation of the groundwater table, or the water level in a well, due to natural causes (such as increased precipitation or a decrease in riparian vegetation) or a decrease in groundwater pumping.

Water Table

The upper surface of the saturated portion of an aquifer.

Watershed

The land area that drains water to a particular stream, river, or lake. It is a land feature that can be identified by tracing a line along the highest elevations between two areas on a map, often a ridge. Large watersheds often contain numerous smaller subwatersheds.

Waters of the United States

All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce including adjacent wetlands and tributaries to waters of the United States; and all waters by which the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce.

Wetlands

Those areas that are inundated by surface or groundwater with a frequency sufficient to support vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction.

Wilderness, Wilderness Area

An area formally designated by Congress as a part of the National Wilderness Preservation System.

Wilderness Characteristics

Qualities identified by Congress in the Wilderness Act of 1964 including size; naturalness; outstanding opportunities for solitude or a primitive and unconfined type of recreation; and supplemental values such as geological, archaeological, historical, ecological, scenic, or other features.

Xeroriparian

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