

## 10 GLOSSARY

**Abiotic:** Refers to nonliving objects, substances, or processes. The abiotic environmental factors include light, temperature, and atmospheric gases.

**Accretion:** The gradual addition of new land to old by deposition of sediment carried by the water of a stream. In the theory of plate tectonics, accretion means the addition of successive geosynclines to the craton.

**Active lek:** Any lek that has been attended by male greater sage-grouse during the strutting season.

**Active raptor nest sites:** Any identified raptor nest site that could provide a nesting opportunity for a raptor.

**Aggradation:** The process by which the level or elevation of a stream bed is raised by deposition of sediment.

**Alluvial:** Formed by the action of running water; of or related to river and stream deposits.

**Alluvial fan:** A gently sloping mass of unconsolidated material (e.g., clay, silt, sand, or gravel) deposited where a stream leaves a narrow canyon and enters a plain or valley floor. Viewed from above, it has the shape of an open fan. An alluvial fan can be thought of as the land counterpart of a delta.

**Alluvium:** A general term for detrital deposits (i.e., sand, gravel, silt) made by rivers and streams. The term applies to stream deposits of recent time.

**Alternating current (AC):** A flow of electrical current that increases to a maximum in one direction, decreases to zero, and then reverses direction and reaches maximum in the other direction. The cycle is repeated continuously. The number of such cycles per second is equal

to the frequency, measured in hertz (Hz). U.S. commercial power is 60 Hz.

**Ambient air:** Outdoor air to which the general public has access.

**Ambient noise level:** The level of acoustic noise at a given location, existing as a composite of sounds from many sources near and far.

**Animal unit month:** The amount of forage needed by an "animal unit" (i.e., a mature 1,000-lb cow and her calf) for one month.

**Antiquities Act of 1906:** This law makes it illegal to remove cultural resources from federal land without permission. It also allows the President to establish historical monuments and landmarks.

**API gravity:** A measurement convention established by the American Petroleum Institute for expressing the relative density of petroleum liquids to water; the greater the API gravity, the less dense the material. API gravities are close (but not equivalent) to specific gravities measured in the Baumé scale, which is the more conventional method of representing the density of a liquid.  $API\ gravity = (141.5 / \text{specific gravity @ } 60^{\circ}F) - 131.5$ ; thus, a petroleum liquid with an API gravity of 10.0 @ 60°F has a specific gravity of 1.0 (which is the same as water). Petroleum liquids with API gravities greater than 10 API gravity degrees have densities less than water and will float; those with API gravities less than 10 will sink. The API gravity scale is calibrated such that most petroleum liquids (crude oils as well as distillate fuels) will have API gravities between 10 and 70 API gravity degrees.

**Aquifer:** An underground bed or layer of earth, gravel, or porous stone that yields usable quantities of water to a well or spring.

**Background noise:** Noise from all sources other than a particular source of interest.

**Batholith:** A large intrusive (plutonic) rock body that has more than 40 square miles of surface exposure and no known floor. The rock becomes exposed as a result of the erosion of the overlying rock.

**Benthic:** Animals dwelling at the bottom of a water body. These organisms inhabit the sediment of lake, river, or ocean bottoms, as well as the sediment in marshes, tidal flats, and other wetlands.

**Big game:** Large species of wildlife that are hunted, such as elk, deer, bighorn sheep, and pronghorn antelope.

**Biota:** The living organisms in a given region.

**Borrow pit:** A pit or excavation area used for gathering earth materials (borrow) such as sand or gravel.

**Browse:** Shrubs, trees, and herbs that provide food for wildlife.

**Bureau of Land Management (BLM):** An agency of the U.S. Department of the Interior that is responsible for managing public lands.

**Bureau of Land Management (BLM) “Gold Book”:** Comprehensive guidance on the design, construction, maintenance, and reclamation of sites and access roads. The guidance can apply to this PEIS to reduce environment impacts.

**Cathodic protection:** Any of several electrochemical methods employed to prevent the corrosion of metallic objects, especially those buried in soil such as iron pipelines. Two methods predominate: “sacrificial anode” and “impressed current.” Sacrificial anode methods electrically bond (connect) an anode made of a metal that corrodes more readily than the metallic object to be protected (e.g., attaching an anode made of zinc or magnesium to an iron pipeline), allowing the metal of lesser value to

corrode in preference to the metal being preserved. Impressed current systems use anodes buried in the soil very near to the object being protected to introduce a current in the soil that flows from the anode to the protected object, counteracting the current that would result from the corrosion of that object (e.g., the oxidation of zero-valent metallic iron to iron (I) or iron (II) with the release of one or two electrons, respectively).

**City gate station:** In natural gas pipeline systems, the city gate station facility typically is owned and operated by a municipality or local gas utility company and interconnects the long-distance interstate pipeline with a local distribution network. City gate stations are composed of a complex array of valves, pipes, and pressure reduction devices designed to meter the gas and reduce its pressure so that it can be delivered safely to customers through distribution networks consisting of local gas mains, smaller-diameter service lines, and individual customer meters.

**Clean Water Act (CWA):** This Act requires National Pollutant Discharge Elimination System permits for discharges of effluents to surface waters, permits for stormwater discharges related to industrial activity, and notification of oil discharges to navigable waters of the United States.

**Clearcut:** (1) To remove or cut all trees in a tract of timber at one time; (2) an area of forest land from which all merchantable trees have recently been harvested.

**Code of Federal Regulations (CFR):** A compilation of the general and permanent rules published in the *Federal Register* by the executive departments and agencies of the United States. It is divided into 50 titles that represent broad areas subject to federal regulation. Each volume of the CFR is updated once each calendar year and is issued on a quarterly basis.

**Colluvium:** A heterogeneous mixture of material that, as a result of gravitational action, has moved down a slope and settled at its base. Avalanches, mudslides, and landslides are processes that deposit colluvium.

**Colocated/colocation:** Colocated points are close to each other or at the same location.

**Corona/corona noise:** The electrical breakdown of air into charged particles caused by the electrical field at the surface of conductors. The phenomenon appears as a bluish-purple glow on the surface of and adjacent to a conductor when the voltage gradient exceeds a certain critical value, thereby producing light, audible noise (described as crackling or hissing), and ozone.

**Cover:** Any form of environmental protection that helps an animal stay alive (mainly shelter from weather and concealment from predators).

**Criteria air pollutants:** Six air pollutants for which the EPA has established primary (health-related) and secondary (welfare-related) standards, the National Ambient Air Quality Standards (NAAQS), expressed as the maximum concentration of each criteria pollutant in ambient air. NAAQS have been established for carbon monoxide, lead, nitrogen dioxide, particulate matter with aerodynamic diameters less than 2.5 microns (PM<sub>2.5</sub>), ozone, and sulfur oxides.

**Critical habitat:** The specific area within the geographical area occupied by the species at the time it is listed as an endangered, threatened, or other special status species. The area in which physical or biological features essential to the conservation of the species are found. These areas may require special management or protection.

**Crucial habitat:** Any particular range or habitat component (often winter or winter/yearlong range) that is the determining factor in a population's ability to maintain and reproduce itself at a certain level over the long term.

**Crucial winter range:** The portion of the winter range to which a wildlife species is confined during periods of heaviest snow cover.

**Cultural resource/cultural property:** A definite location of human activity, occupation, or use identifiable through field inventory (survey), historical documentation, or oral evidence. The term includes archaeological, historic, or architectural sites, structures, or places with important public and scientific uses and may include definite locations (sites or places) of traditional cultural or religious importance to specified social and/or cultural groups.

**Decibel (dB):** A standard unit of sound measurement. In general, a sound doubles in loudness with every increase of 10 decibels.

**Decibel, A-weighted (dBA):** A measurement of sound approximating the sensitivity of the human ear and used to characterize the intensity or loudness of a sound.

**Decommissioning:** All activities necessary to take out of service and dispose of a facility after its useful life.

**Direct current (DC):** Electric current that flows in one direction only.

**Ecoregion:** A geographically distinct area of land that is characterized by a distinctive climate, ecological features, and plant and animal communities.

**Electromagnetic fields (EMFs):** Fields that surround both large power lines that distribute power and the smaller electric lines in homes and appliances. Generated when charged particles (e.g., electrons) are accelerated. Charged particles in motion produce magnetic fields. Electromagnetic fields are typically generated by alternating current in electrical conductors. They may also be referred to as EM fields.

**Endangered species:** Any species that is in danger of extinction throughout all or a significant portion of its range.

**Endangered Species Act of 1973 (ESA):** This Act requires consultation with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service to determine if endangered, threatened, or other special status species or their habitats will be impacted by a proposed activity and what, if any, mitigation measures are needed to address the impacts.

**Energy Policy Act of 2005 (EPA):** A bill passed by the 109th Congress in August 2005 that includes various initiatives directed at securing the nation's energy future, which include authorizing the DOE in collaboration with federal land management agencies to designate corridors for energy transmission on federal lands within the 11 contiguous western states.

**Environmental assessment (EA):** A concise public document that a federal agency prepares under the National Environmental Policy Act to provide sufficient evidence and analysis to determine whether a proposed action requires preparation of an environmental impact statement or whether a Finding of No Significant Impact can be issued. An environmental assessment must include brief discussions on the need for the proposal, the alternatives, the environmental impacts of the proposed action and alternatives, and a list of the agencies and persons consulted.

**Environmental Impact Statement:** A document required of federal agencies by the National Environmental Policy Act for major proposals or legislation that will or could significantly affect the environment.

**Ephemeral stream:** An ephemeral stream has flowing water only during, and for a short time after, precipitation events. Ephemeral stream beds are located above the water table year-round; groundwater is not a source of water for the stream. Many desert streams are ephemeral.

**Evapotranspiration:** Loss of water from the soil both by evaporation and by transpiration from plants.

**Extirpation:** The elimination of a species or subspecies from a particular area, but not from its entire range.

**Fault line:** Line determined by the intersection of a geological fault and the Earth's surface.

**Federal Cave Resources Protection Act:** This Act allows the collection and removal of resources from federal caves only when a permit has been authorized by the Secretary of Agriculture or the Secretary of the Interior.

**Federal Energy Regulatory Commission (FERC):** A U.S. government agency created by Congress in 1977 to regulate and oversee energy industries in the economic, environmental, and safety interests of the American public.

**Federal Land Policy and Management Act of 1976 (FLPMA):** This Act requires the Secretary of the Interior to issue regulations to manage public lands and the property located on those lands for the long term.

**Floodplain:** Flat land along a river or stream that may become submerged during floods, when the river or stream overflows its banks.

**Fluvial:** Pertaining to river or stream-related features or processes. Fluvial sediments are deposited by rivers or streams.

**Forage:** All browse and herbaceous foods available to grazing animals that may be grazed or harvested for feeding.

**Fugitive dust:** Particulate air pollution released to the ambient air from ground-disturbing activities related to construction, manufacturing, or transportation (i.e., the discharges are not released through a confined stream such as a stack, chimney, vent, or other functionally equivalent opening).

**Fur-bearing animal:** Badger, beaver, bobcat, marten, mink, muskrat, and weasel.

**Gallinaceous birds:** A term used for birds of the order Galliformes. They are heavy-bodied, largely ground-feeding domestic or game birds that include chickens, pheasant, turkeys, grouse, partridges, and quail.

**Game birds:** Grouse, partridge, pheasant, ptarmigan, quail, wild turkey, and migratory game birds.

**Granitic rock:** A light-colored, coarse-grained igneous (plutonic) rock.

**Groundwater:** Subsurface water that is in the zone of saturation, usually in porous rocks, fractures of rocks, or underground caves.

**Habitat:** A specific set of physical conditions that surround a species, group of species, or a large community. In wildlife management, the major constituents of habitat are considered to be food, water, cover, and living space.

**Herbaceous:** Pertaining to or characteristic of an herb (fleshy-stem plant) as distinguished from the woody tissue of shrubs and trees.

**Herd management area (HMA):** An area that has been designated for continuing management of wild horses.

**Hogan:** A one-room Navajo structure used as a dwelling or for ceremonial purposes.

**Home range:** The area in which an animal travels in the scope of its natural activities.

**Homestead Act of 1862:** Law passed by the federal government setting liberal terms for the acquisition of land by people who agreed to settle on the land.

**Hypolimnetic:** The deeper, cooler portions of a reservoir or lake that result from stratification.

**Igneous rock:** A rock that cooled and solidified from molten or partly molten material (magma). Igneous rock includes volcanic rock (rock solidified near the earth surface) and plutonic rock (rock solidified at considerable depth).

**Impermeable soil:** A soil through which water has difficulty flowing.

**Impoundments:** (1) Structures which remove land of the foreshore or seabed from the influence of tides; (2) human-engineered and dammed lakes, ponds, and reservoirs.

**Inactive raptor nests:** Any nest site that has been monitored in 6 of the last 10 years and documented as being unoccupied each time it was monitored.

**Infrastructure:** The basic facilities, services, and utilities needed for the functions of an industrial facility or site.

**Interagency operating practice (IOP):** A practice or combination of practices that are determined to provide the most effective, environmentally sound, and economically feasible means of managing an activity and mitigating its impacts.

**Intermittent streams:** A stream that ceases to flow in very dry periods.

**Intermontane:** Between or surrounded by mountains.

**Introduced species:** A non-native species that was intentionally or unintentionally brought into an area by humans.

**Invasive species:** A species that is not native (or is alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health (Executive Order 13112).

**Jacal:** Construction using walls of close-set wooden stakes plastered with mud and roofed with straw, rushes, or other materials. Related to adobe.

**Karst:** A distinctive landscape (topography) that can develop where underlying bedrock, usually limestone, is partially dissolved by surface water or groundwater.

**Kiva:** A Pueblo ceremonial chamber often built below ground and frequently detached from habitation rooms.

**Lacustrine:** Pertaining to a lake. Lacustrine sediments are deposited in lakes.

**Landslide:** Downhill movements of geologic material by gravity force. Landslide-prone areas generally are high, steep, rugged terrains that experience high levels of precipitation.

**Lattice towers:** A freestanding steel framework tower that is used as pylon, especially for voltages above 100 kilovolts.

**Laydown area:** An area that has been cleared for the temporary storage of equipment and supplies. Laydown areas are usually covered with rock and/or gravel to ensure accessibility and safe maneuverability for transport and off-loading of vehicles.

**L<sub>dn</sub>:** The day-night average A-weighted sound level, averaged over a 24-hour period after the addition of 10 dB to sound levels from 10:00 p.m. to 7:00 a.m. to account for increased annoyance from nighttime noise.

**Lead (Pb):** A gray-white metal that is listed as a criteria air pollutant. Health effects from exposure to lead include brain and kidney damage and learning disabilities. Sources include leaded gasoline and metal refineries.

**Lek:** A traditional courtship display area attended by male greater sage-grouse in or adjacent to sagebrush-dominated habitat. Designation of the site as a lek requires the

observation of two or more male sage-grouse engaged in courtship displays.

**L<sub>eq</sub>:** Equivalent/continuous sound level. L<sub>eq</sub> is the steady sound level that would contain the same total sound energy as the time-varying sound over a given time.

**Liquefaction:** Changing a solid into a liquid.

**Liquefied natural gas (LNG):** Liquefied natural gas is natural gas that has been processed to remove impurities and heavy hydrocarbons; it is then condensed into a liquid at atmospheric pressure and stored in specially designed tanks. The volume of LNG is about 1/600th that of natural gas in standard atmospheric conditions, making it much more cost-efficient to transport over very long distances.

**Liquid petroleum:** Includes crude oil, crude or partially refined bitumen and shale oils, partially refined petroleum feedstock, and refined petroleum distillates that are routinely transported by pipeline, including but not limited to fuel oils, gasoline, diesel fuel, jet fuel, and kerosene. Liquid petroleum also includes liquefied petroleum gas (LPG).

**Listed species:** Any species of fish, wildlife, or plant that has been determined, through the full, formal Endangered Species Act listing process, to be either threatened or endangered.

**Meandering:** Following a winding or intricate course.

**Metamorphic rock:** Any rock derived from preexisting rocks by mineralogical, chemical, and/or structural changes in response to marked changes in temperature, stress, and chemical environment, generally occurring deep in the Earth's crust.

**Migratory Bird Treaty Act of 1918 (MBTA):** Act that requires that the U.S. Fish and Wildlife Service be consulted to determine the effects of a proposed activity on migratory birds and

requires that opportunities to minimize the effects be considered.

**Mitigation:** A method or process by which impacts from actions can be made less injurious to the environment through appropriate protective measures. Also called mitigative measure.

**Moraine:** Landforms composed of unsorted materials deposited by glaciers. They can cover broad geographic areas of millions of acres. Topography can vary from nearly level “till” plains to rough end-moraine landscapes.

**Nanotechnology:** Nanotechnology is the understanding and control of matter at dimensions of roughly 1 to 100 nanometers, where unique phenomena enable novel applications. Encompassing nanoscale science, engineering, and technology, nanotechnology involves imaging, measuring, modeling, and manipulating matter at this length scale. At the nanoscale, the physical, chemical, and biological properties of materials differ in fundamental and valuable ways from the properties of individual atoms and molecules or bulk matter. Nanotechnology R&D is directed toward understanding and creating improved materials, devices, and systems that exploit these new properties.

**National Ambient Air Quality Standards (NAAQS):** Air quality standards set by the EPA for the six criteria pollutants. There are two standards for particulate matter: PM<sub>10</sub> and PM<sub>2.5</sub>. The primary National Ambient Air Quality Standards specify maximum outdoor air concentrations of criteria pollutants that would protect the public health within an adequate margin of safety. The secondary National Ambient Air Quality Standards specify maximum concentrations that would protect the public welfare from any known or anticipated adverse effects of a pollutant.

**National conservation area (NCA):** Areas designated by Congress to provide for the conservation, use, enjoyment, and enhancement

of certain natural, recreational, paleontological, and other resources, including fish and wildlife habitat.

**National Environmental Policy Act of 1969 (NEPA):** This Act requires federal agencies to prepare a detailed statement on the environmental impacts of their proposed major actions significantly affecting the quality of the human environment.

**National Historic Preservation Act of 1966, as Amended (NHPA):** This Act requires federal agencies to take into account the effects of their actions on historical and archaeological resources and consider opportunities to minimize their impacts.

**National historic trails:** These trails are designated by Congress under the National Trails System Act of 1968 and follow, as closely as possible, the original trails or routes of travel on federal land that have national historic significance.

**National Landscape Conservation System:** Created by the BLM in June 2000 to increase public awareness of BLM lands with scientific, cultural, educational, ecological, and other values. It consists of national conservation areas, national monuments, wilderness areas, wilderness study areas, wild and scenic rivers, and national historic and scenic trails.

**National Park Service (NPS):** Founded in 1916, NPS is an agency of the U.S. Department of the Interior and is responsible for the national parks.

**National Register of Historic Places (NRHP):** A list maintained by the Secretary of the Interior as the official list of historic properties (districts, sites, buildings, structures, and objects) deserving preservation because of their local, state, or national significance in American history, architecture, archaeology, engineering, and culture. Properties listed on or eligible for the *National Register* are protected by the

National Historic Preservation Act of 1966, as amended.

**National wilderness areas:** Areas designated by Congress and defined by the Wilderness Act of 1964 as places “where the earth and its community are untrammelled by man, where man himself is a visitor who does not remain.” Designation is aimed at ensuring that these lands are preserved and protected in their natural condition.

**Native American Graves Protection and Repatriation Act of 1990 (NAGPRA):** Requires federal agencies to consult with the appropriate Native American Tribes prior to the intentional excavation of human remains and funerary objects. It requires the patriation of human remains found on the agencies’ land.

**Native species:** A species that, other than as a result of an introduction, historically occurred or currently occurs in an ecosystem (Executive Order 13112).

**Nitrogen dioxide (NO<sub>2</sub>):** A toxic, reddish-brown, oxidizing gas with the chemical formula NO<sub>2</sub> that is produced during the combustion of fossil fuels. Together with other nitrogen oxides, nitrogen dioxide reacts with volatile organic chemicals in the atmosphere to form ozone, a primary constituent of photochemical smog, and also plays a major role in the formation of acid rain and visibility-impairing aerosols. Nitrogen dioxide is one of six criteria air pollutants for which the EPA has established primary and secondary National Ambient Air Quality Standards (NAAQSs) for maximum concentrations in ambient air to protect human health and welfare, respectively.

**Nitrogen oxides (NO<sub>x</sub>):** Various compounds of nitrogen and oxygen, including primarily nitrogen dioxide (NO<sub>2</sub>), nitric oxide (NO), and nitrous oxide (N<sub>2</sub>O), which are formed from the combustion of fossil fuels. Once released into the atmosphere, nitrogen oxides react with volatile organic chemicals (VOCs) in reactions

catalyzed by ultraviolet light to form ozone, a primary component of photochemical smog. Nitrogen oxides are also precursors to acid rain. Nitrogen dioxide is one of six criteria pollutants for which National Ambient Air Quality Standards (NAAQS) have been developed.

**Noise:** Unwanted sound.

**Nonattainment area:** The U.S. Environmental Protection Agency’s designation of an area in which the ambient air concentrations of one or more criteria pollutants exceed National Ambient Air Quality Standards or contribute to such exceedances in a nearby area.

**Noxious weed:** Any living stage (including but not limited to seeds and reproductive parts) of any parasitic or other plant of a kind, or subdivision of a kind, which is of foreign origin, is new to or not widely spread or prevalent in the United States, and can directly or indirectly injure crops, other useful plants, livestock, or poultry or other interests of agriculture, including irrigation or navigation or the fish or wildlife resources of the United States or the public health (Federal Noxious Weed Act of 1974).

**Occupied lek:** A lek that has been active during at least one strutting season within the last 10 years.

**Oil sand:** See tar sand.

**Oil shale:** A fine-grained sedimentary rock that contains various inorganic minerals and the organic material kerogen, which, when subjected to heating, pyrolyzes to form raw shale oil that can be further processed into synthetic crude oil. Oil shale is classified as terrestrial, lacustrine, or marine, based on the type and location of the decaying organic matter from which it originated. Oil shale is often codeposited with minerals such as nahcolite (sodium bicarbonate), alum, and dawsonite, and with metals such as copper, zinc, and uranium.

**Orogeny:** A period of mountain building; also, a major mountain-building episode in geologic history.

**Outwash plain:** A smooth plain covered by deposits from water flowing from glaciers.

**Ozone (O<sub>3</sub>):** A chemically reactive, corrosive gas, ozone is formed from natural processes (e.g., by lightning) and also by the ultraviolet light-catalyzed reaction of nitrogen oxides with volatile organic chemicals in the atmosphere. When formed in the troposphere (that portion of the earth's atmosphere closest to the Earth's surface), ozone acts as the primary constituent of photochemical smog. When present in the stratosphere, however, ozone provides essential protection for all life on Earth by filtering harmful levels of ultraviolet radiation.

**Paleontological resources:** The fossil remains of ancient life-forms, their imprints, or behavioral traces (e.g., tracks, burrows, residues) and the rocks in which they are preserved. These are distinct from human remains and artifacts, which are considered archaeological or historical materials.

**Paleontology:** The study of plant and animal life that existed in former geologic times, particularly through the study of fossils.

**Particulate matter:** Fine particles of solids or liquids such as dust, smoke, mist, fumes, or smog. When released into the atmosphere, particulates can adversely impact human health or quality of life. Particulate matter with aerodynamic diameters of 2.5 micrometers or less (where one micrometer is one-millionth of a meter) are defined by the EPA as a criteria pollutant for which both primary and secondary National Ambient Air Quality Standards (NAAQS) have been established to protect human health and welfare, respectively.

**Parturition areas:** Birthing areas commonly used by more than a few female members of a population. Generally used when referring to ungulates, such as elk and mule deer.

**Passerines:** Perching birds or songbirds of the order Passeriformes.

**Peak electrical demand:** Determines the minimum amount of generating capacity and the corresponding amount of transmission and distribution facilities required to maintain a reliable electric system. The peak demand is expressed in units of power (kilowatts, megawatts) and the maximum instantaneous requirement for electricity that occurs during a specified time period. The electric load corresponds to a maximum level of electric demand in a specified time period.

**Percolation:** The downward movement of water through soil.

**Perennial stream:** Streams that flow continuously.

**Permeable soil:** A soil through which water can flow easily.

**Petroglyph:** A design scratched, pecked, or scraped into a rock surface.

**Physiographic (physiography):** The physical geography of an area or the description of its physical features.

**Pictograph:** A design drawn in pigment upon an unprepared or ground rock surface.

**Pigging facilities:** Facilities positioned within a pipeline network to launch and recover "pigs," which are devices inserted into a pipeline to clean the inner walls of the pipe and monitor for critical conditions that could compromise pipeline integrity or operational efficiency, such as cracks, corrosion, or pipe deformations. Pigging can be accomplished without interruption of pipeline operation, with the pig carried through the pipe by the commodity being transported.

**Pigs:** Devices routinely introduced into pipelines to clean the inner walls of the pipe and monitor for critical conditions that could compromise the

integrity or efficiency of the pipeline, such as cracks, corrosion, and pipe deformations.

**Playa/playa lake:** Playa is a dry, barren area in the lowest part of an undrained desert basin, underlain by clay, silt, or sand and commonly by soluble salts. Playa lake is a shallow, intermittent lake in an arid region, occupying a playa in the wet season but drying up in summer and leaving mineral deposits (evaporites) behind.

**Plutonic rock:** A rock crystallized from molten material (magma) at considerable depth; typically coarse-grained.

**Potential Fossil Yield Classification (PFYC):** Initially developed by the U.S. Forest Service and the Region 2 Paleo Initiative in May 1996, the PFYC system provides baseline guidance for assessing the relative occurrence of important paleontological resources and the need for mitigation. Specifically, it is used to classify geologic units, at the formation or member level, according to the probability that they could yield paleontological resources of concern to land managers.

**PM<sub>2.5</sub>:** Particulate matter with a mean aerodynamic diameter of 2.5 micrometers (0.00010 inch) or less. PM<sub>2.5</sub> is regulated as a criteria pollutant under Title I of the Clean Air Act.

**PM<sub>10</sub>:** Particulate matter with a mean aerodynamic diameter of 10 micrometers (0.00039 inch) or less. Particles with this diameter (or smaller) are small enough to be deposited in the lungs. PM<sub>10</sub> is regulated as a criteria pollutant under Title I of the Clean Air Act.

**Population:** A group of organisms, all of the same species, which occupies a particular area. The term is used to refer to the number of individuals of a species within an ecosystem or of any group of like individuals.

**Prevention of Significant Deterioration (PSD)**

**Program:** An air pollution-permitting program for major new and modified existing sources that limits increases in pollution levels caused by sources and their associated development.

**Proposed for listing:** Species that have been formally proposed for listing by the USFWS by a notice in the *Federal Register*.

**Pueblitos:** A small town (Spanish).

**Radon:** Chemically inert radioactive gas formed from the radioactive decay of naturally occurring “parent elements” such as uranium and thorium and the subsequent radioactive decay of some of their radioactive “daughters,” such as radium. Radon emits alpha radiation with a half-life of approximately 3.8 days and is a health hazard, especially if inhaled; it is one of the leading causes of lung cancer in America.

**Raptor:** Bird of prey, such as hawks, owls, vultures, and eagles, with sharp talons and strongly curved beaks.

**Receptor:** A human or ecological entity potentially at risk of exposure to an environmental stressor.

**Recharge:** The addition of water to an aquifer by natural infiltration (e.g., rainfall that seeps into the ground) or by artificial injection through wells.

**Reliability:** Refers to the ability of the transmission system to deliver energy (especially electrical energy) when needed under a set of accepted standards and that avoids disruptions or outages.

**Rhyolitic rock:** A light-colored, fine-grained igneous (volcanic) rock chemically equivalent to granite.

**Right-of-way (ROW):** Public land authorized to be used or occupied pursuant to a right-of-way grant. A right-of-way grant authorizes the use of a right-of-way over, upon, under, or through

public lands for construction, operation, maintenance, and termination of a project.

**Riparian:** Relating to, living in, or located on the bank of a river, lake, or tidewater.

**Rip-rap:** A combination of large stones, cobbles, and boulders used to line channels, stabilize banks, reduce runoff velocities, or filter out sediment.

**Sage grouse nesting/early brood-rearing habitat:** Nesting habitat for sage grouse is generally described as sagebrush that has canopy cover between 15 and 30% and heights between 11 and 32 inches. Herbaceous plant height (6 inches or greater) and canopy cover (>15%) provide important cover and food for sage grouse using these habitats. Early brood-rearing habitat generally has 10 to 25% sagebrush canopy cover and has slightly higher canopy cover of grasses and forbs than nesting habitat. Early brood-rearing habitat is generally used by sage grouse hens with chicks when the chicks range from 1 to 21 days in age. Variations in plant height and percent cover may occur among states.

**Sage grouse winter habitats:** During winter, sage grouse feed almost exclusively on sagebrush leaves and buds. For winter habitat to be suitable, there must be sagebrush above the snow. Sage grouse tend to select wintering sites where sagebrush is 10 to 14 inches above the snow. Sagebrush canopy cover used by sage grouse above the snow may range from 10 to 30%. Foraging areas tend to be on flat to generally southwest-facing slopes and windswept ridges.

**Savannah:** A flat grassland of tropical and subtropical regions usually having distinct periods of dry and wet weather.

**Scour:** Soil erosion when it occurs underwater, as in the case of a streambed.

**Sediment:** Solid fragmental material transported and deposited by wind, water, or ice; chemically

precipitated from solution; or secreted by organisms.

**Sedimentary rock:** A rock resulting from the consolidation of sediment.

**Seeps:** Wet areas, normally not flowing, arising from an underground water source. Any place where liquid has oozed from the ground to the surface.

**Seismic:** Pertaining to any earth vibration, especially that of an earthquake.

**Silt:** Sedimentary material consisting of fine particles that are intermediate in size between sand and clay.

**Sinks:** Natural systems (for example, forests and wetlands) that absorb and store greenhouse gases; also, a reservoir that uptakes a chemical element or compound from another part of its cycle.

**Slash:** Any tree tops, limbs, bark, abandoned forest products, windfalls, or other debris left on the land after timber or other forest products have been cut.

**Slurry:** A thick mixture of a liquid and any of several finely divided substances; most typically, an emulsion of insoluble solids in water. Slurry pipelines are used to transport a variety of materials, including coal, copper, iron, and phosphate ores; limestone; and tar sands.

**Soluble:** Capable of being dissolved.

**Special status species:** Special status species include both plant and animal species that are officially listed as threatened or endangered or are proposed or are candidates for listing as threatened or endangered under the provisions of the Endangered Species Act; also, those listed by a state in a category such as threatened or endangered, implying potential endangerment or extinction; and those designated as sensitive by individual BLM state directors.

**State historic preservation officer (SHPO):**

The state officer charged with identifying and protecting prehistoric and historic resources in accordance with the National Historic Preservation Act.

**State implementation plans (SIPs):**

EPA-approved state plans that contain the regulations and other materials for meeting air standards and other requirements of the Clean Air Act.

**Strutting ground:** An area used by sage grouse in early spring for elaborate, ritualized courtship displays (also see lek).

**Subduction:** The process by which one tectonic plate moves beneath another.

**Sulfur oxides:** Sulfur oxides are pungent, colorless gases that are formed primarily by fossil fuel combustion. Sulfur oxides may damage the human respiratory tract and also plants and trees. SO<sub>2</sub> is regulated as a criteria pollutant under Title I of the Clean Air Act.

**Surface water:** Water on the Earth's surface that is directly exposed to the atmosphere, as distinguished from water in the ground (groundwater).

**Tar sand:** Also referred to as "oil sand" or "bituminous sand," tar sand is a sedimentary material composed primarily of sand, clay, water (in some deposits), and organic constituents known as bitumen. Processing of tar sand involves separating the bitumen fraction from the inorganic materials and subsequently upgrading the bitumen through a series of reactions to produce a synthetic crude oil feedstock that is suitable for further refining into distillate fuels in conventional refineries.

**Tectonic:** Forces or conditions within the Earth that cause movements of the crust, such as earthquakes, folds, and faults.

**Terrace:** A former floodplain underlain by sediment deposited by a stream when the stream was flowing at a higher level; typically forms a

relatively level bench along the side of a valley adjacent to a recent floodplain.

**Terrestrial:** Belonging to or living on land.

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

**Tiering:** The coverage of general matters in broader documents with subsequent narrower statements or environmental analyses.

**Total suspended solids (TSS):** A measure of the amount of small, particulate solid pollutants that are suspended in natural water or wastewater.

**Tuff:** Volcanic rock made up of rock, glass, and/or mineral fragments in a volcanic ash matrix.

**Turbidity:** A measure of the cloudiness or opaqueness of water. Typically, the higher the concentration of suspended material, the greater the turbidity.

**Ungulates:** Hoofed animals, including ruminants but also horses, tapirs, elephants, rhinoceroses, and swine.

**Viewshed:** A physiographic area composed of land, water, and biotic and cultural elements that may be viewed and mapped from one or more viewpoints and that have inherent scenic qualities and/or aesthetic values as determined by those who view it.

**Viscosity:** The resistance of a liquid to flow.

**Visual resources:** Refers to all objects (man-made and natural, moving and stationary) and features such as landforms and water bodies that are visible on a landscape.

**Volatile organic compounds (VOCs):** A wide variety of organic compounds, typically liquids, that share the physical property of readily

evaporating into the gas phase at normal temperatures and pressures. Sources include industrial solvents and petrochemical feedstocks (e.g., benzene); common vehicle fuels (e.g., gasoline); and some industrial degreasing, cleaning, and stripping agents (e.g., methylene chloride). Once released into the atmosphere, some VOCs are photochemically reactive, undergoing ultraviolet light-catalyzed reactions with nitrogen oxides to produce ozone, a primary constituent of photochemical smog. Regulations promulgated under the Clean Air Act establish limits for the release to the atmosphere of VOCs, especially those that exhibit hazardous properties (hazardous air pollutants [HAPs]), although VOCs are not a criteria pollutant. They are defined for air quality regulatory purposes by the EPA's definition in 40 CFR 51.100(s).

**Volcanic rocks:** An igneous rock that cools and solidifies at the Earth's surface; typically fine-grained.

**Voltage:** The electrical potential difference between two points expressed in volts.

**Western electricity transmission grid:** West-wide interconnected network of transmission lines encompassing parts of 14 western states, two Canadian provinces, and northwestern Mexico. The grid provides for the long-distance transmission of electricity between these areas in response to electricity demand and supply.

**West-wide Energy Corridor PEIS:** Considers 11 contiguous western states for the possible construction, operation, maintenance, and decommissioning and dismantling of energy infrastructure such as oil and gas pipelines and electric transmission lines; the states considered are Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. Construction, operation, maintenance, and decommissioning and dismantling of pipelines, transmission lines, and energy infrastructure would affect

groundwater and surface water resources. The areas constitute the affected environment.

**Wetlands:** Areas that are soaked or flooded by surface or groundwater frequently enough or long enough to support plants, birds, animals, and aquatic life. Wetlands generally include swamps, marshes, bogs, estuaries, and other inland and coastal areas and are federally protected.

**Wild and scenic river:** According to the Wild and Scenic River Act, wild and scenic rivers are wild, scenic, or recreational rivers designated by Congress or by the legislature of the state through which they flow. A river so designated, together with related adjacent lands, possesses remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, preserved in a free-flowing condition.

**Wild Free-Roaming Horses and Burros Act:** Act passed by Congress in 1971 gives BLM the responsibility to protect, manage, and control wild horse and burro populations.

**Wild Horse and Burro Adoption Program:** BLM program that offers excess animals for adoption to qualified people. After caring for an animal for 1 year, the adopter is eligible to receive title, or ownership, from the federal government.

**Wild horses and burros:** Unbranded and unclaimed horses or burros roaming free on public lands in the western United States and protected by the Wild Free-Roaming Horse and Burro Act of 1971. They are descendants of animals that were turned loose by or escaped from ranchers, prospectors, Indian Tribes, and the U.S. cavalry from the late 1800s through the 1930s.

**Wild Horse Herd Management Area (WHHMA or HMA):** An area that has been designated for continuing management of wild horses.

**Wilderness study area:** Areas designated by a federal land management agency as having wilderness characteristics, which make them worthy of being considered by Congress for wilderness designation.

**Wind farm:** One or more wind turbines operating within a contiguous area for the purpose of generating electricity.

**Wind rose:** A graphical representation of wind speed, direction, and frequency averaged over a specific time interval. Direction is represented by radial bars oriented from the center of the

circular graph in each of the directions from which the wind has originated over the time interval being represented. The strengths of the winds are represented by the thickness of the radial bars and the lengths of each segment of different thickness; the frequency of occurrence of the wind in each direction is represented by the extent to which each bar extends from the center of the graph to concentric circles, which represent increasing frequencies as the circles expand from the center of the graph.

**Xeric:** Low in moisture.