

APPENDIX C

GLOSSARY

- ACRE-FOOT. A term used in measuring the volume of water, equal to the quantity required to cover 1 acre to a depth of 1 foot, or 43,560 cubic feet.
- ALBEDO. The ratio of the amount of electromagnetic radiation reflected by a body to the amount incident upon it.
- ALLUVIAL TERRACE. Alluvium deposited in a narrow, relatively level band along the course of a stream, marking a former water level.
- ALLUVIUM. Clay, silt, sand, gravel, or other rock material transported by flowing water and deposited as sediment.
- AMBIENT CONCENTRATION. The ground-level pollutant concentration resulting from all sources, man-made or natural.
- ANIMAL UNIT MONTHS. A measure of the forage or feed required to maintain one animal unit (a cow, a horse, or five sheep) for 1 month (30 days).
- AQUIFER. A body of rock that is saturated with and conducts groundwater; a water-bearing formation that yields water to wells or springs.
- ARTESIAN FLOW. The discharge of water from a well or spring by artesian pressure or hydrostatic pressure within a confined aquifer. A confined aquifer is one surrounded by less permeable rock layers.
- CARRYING CAPACITY. The maximum number of all animals that an area can support during a given period of the year.
- CATION-EXCHANGE SOFTENING. The natural exchange of calcium and magnesium ions in water for the sodium ions in clay. A similar exchange process occurs in household water softeners.
- CLASS A PAN EVAPORATION RATE. The rate at which water evaporates into the atmosphere from a cylindrical pan 48 inches in diameter and 10 inches deep.
- CLOSED-CANOPY FOREST. A forest in which the leaves and branches at the tops of the trees touch.
- COLIFORM COUNT. The number of colonies of coliform bacteria in a given volume; an indication of the fecal contamination of water. Coliform bacteria inhabit the colons of warm-blooded animals.
- COMMUNITY. An aggregation of organisms (plant or animal) within a specific area.
- CONE OF DEPRESSION. A depression in the potentiometric surface of a body of groundwater. It develops around a well from which water is withdrawn or around a mine which intercepts an aquifer.

CRITICAL (OR CRUCIAL) WILDLIFE HABITAT. That portion of the habitat of a wildlife species that is essential to the survival and perpetuation of that species, either as a population or as individuals.

DENDRITIC DRAINAGE PATTERN. A drainage pattern in which streams branch irregularly in all directions, resembling the branching pattern of trees.

DISCHARGE (GROUNDWATER). The removal of water from an aquifer.

DRAWDOWN. The difference between the static water level in an aquifer and that resulting from removal of water from the aquifer.

EPHEMERAL STREAM. A stream which flows only in response to precipitation or snowmelt.

EVAPOTRANSPIRATION RATE. The rate at which water is lost from the land area through transpiration of plants and evaporation from the soil.

FAULT. A zone of rock fracture along which there has been displacement.

FUGITIVE DUST. Dust particles made airborne by wind or man's activities. Common sources include unpaved roads, construction sites, and tilled land.

HEADCUTTING (SCALPING). An upvalley movement of a stream gully as flowing water cuts or erodes soil into the channel. The gully resulting from headcutting is so deep it cannot be crossed by wheeled vehicles or eliminated by plowing.

HORIZON (SOIL). A layer of soil, approximately parallel to the surface, that has characteristics of color, structure, or texture distinct from other layers.

INFILTRATION RATE. The rate at which soil can absorb falling rain or melting snow.

INTERMITTENT STREAM. A stream which flows only part of each year.

ISOPLETH. A line on a map connecting points at which a given variable, such as air pollutant concentration, has a constant value.

LAKE EVAPORATION. The amount of water which evaporates from a body of water during a given period of time.

LEACHATE. A solution obtained by leaching.

LEACHING. The removal in solution of soluble constituents (such as mineral salts or organic matter) from an upper to a lower soil or rock layer by water draining through them.

LENTICULAR FORMATION. A lens-shaped body of rock, thick in the middle and thinning toward the edges.

LIMITING FACTOR. The living or nonliving factor of the environment which is in least supply and which is critical to survival of a plant or animal.

LITHIC MATERIAL. Any stone material worked by man--flakes, tools, or debitage from tool production and maintenance.

LITHOLOGY. The physical character of rock.

"MAJOR" STATIONARY SOURCE. A facility which has uncontrolled emissions greater than 250 tons per year of any criteria pollutant, or greater than 100 tons per year of sulfur dioxide or particulates.

MIXING HEIGHT. The height above the ground below which turbulence causes the air to be well mixed.

ORGANIC COMPOUND. A compound containing carbon, especially in which hydrogen is attached to carbon.

ORGANIC MATTER. Any material derived from living things, as opposed to mineral or inorganic matter. The organic matter in soil consists primarily of the remains of plants.

OXIDATION. The process by which a chemical is changed by combining it with oxygen, or by increasing the proportion of its electronegative parts.

PARENT MATERIAL. The unconsolidated, weathered mineral or organic material from which soil develops.

PARTING. A band of waste material, such as shale, which divides layers of coal.

PERCHED GROUNDWATER. Groundwater perched on an impermeable rock lens and separated from an underlying body of groundwater by unsaturated rock.

PERENNIAL STREAM. A stream that flows continuously throughout the year.

PERMEABILITY. The capacity of a porous rock or sediment for transmitting fluid.

PERMEABILITY RATE (SOIL). The rate at which water passes through a layer of soil.

pH. An expression of acidity or alkalinity, measured on a scale of 0 through 14, on which 7 represents neutrality. Values less than 7 represent increasing hydrogen ion concentration (increasing acidity). Values greater than 7 represent decreasing hydrogen ion concentration (increasing alkalinity).

PHOTOCHEMICAL OXIDANT. A secondary pollutant formed in a photochemical reaction involving hydrocarbons and oxides of nitrogen.

PICOCURIE. One trillionth of one curie. A curie is a measure of radioactivity equal to 3.7×10^{10} disintegrations per second.

PLAYA. A shallow, completely closed (undrained) basin where water collects (as after a rain) and quickly evaporates, often leaving deposits of soluble salts.

POINT-WATERING SOURCE. A pool in the bed of an intermittent stream, or any spring, well, or stockpond where livestock and wildlife can obtain water.

POTENTIOMETRIC SURFACE. An imaginary surface representing the static head of groundwater and defined by the level to which water will rise in a well. The water table is a particular potentiometric surface.

PREFERENCE RIGHT COAL LEASE APPLICATION. An application for a federal coal lease for which the applicant has established a preferential or first right through his initiative in prospecting for and demonstrating the occurrence of commercial quantities of coal.

PRODUCTIVE CAPACITY. The weight of forage that is produced within a designated period of time on a given area. In this document, productive capacity refers to pounds of air-dry forage produced on 1 acre in 1 year.

RAPTOR. A bird of prey, such as a hawk, eagle, or owl; a bird that feeds on meat taken by hunting.

RECHARGE (GROUNDWATER). The addition of water to an aquifer.

REDUCTION. The process by which a chemical is changed by combining it with hydrogen, or by decreasing the proportion of its electronegative parts.

RIPARIAN VEGETATION. Vegetation associated with or growing along a stream or river.

SCORIA. The local name for clinker or porcellanite; baked clay or shale with a dull, light-colored appearance, often found in the roof or floor of a burned-out coal seam.

SECONDARY AND TERTIARY OIL RECOVERY. Methods by which water is pumped into an oil-bearing formation to increase pressure in the formation and allow extraction of an oil-water mixture which can then be separated. These methods are used only after primary production (extraction by pressure in the oil pool alone) is no longer economical.

SEDIMENTATION. The process by which rock particles are eroded, transported and deposited, usually by flowing water.

SHEET EROSION. Erosion caused by sheets of flowing water, as distinct from erosion by streams flowing in channels.

STATIC HEAD. The height above a reference level of the surface of a column of water that can be supported by the static pressure at a given point.

STORAGE COEFFICIENT. The volume of water released from storage in a vertical column of 1.0 square feet when the water table or other potentiometric surface declines 1.0 feet.

STRATIFIED SITE. A site at which more than one component or layer of cultural materials is present. Lower layers are older than upper ones.

STRUCTURAL DEPRESSION (BASIN). An area which is depressed and filled with sediment, bordered (in Wyoming) by faulted and uplifted rock.

STRUCTURAL RELIEF. The difference in elevation between the highest and lowest points of a formation or layer of rock in a given region.

STRUTTING GROUND. An area of open ground used year after year by sage grouse for courtship displays.

SURFACE-BASED INVERSION. A layer of air near the ground in which temperatures increases with altitude, the result being a zone in which pollutants become trapped rather than dispersing.

SYNCLINE. An elongated fold in rocks, the core of which is composed of stratigraphically younger rocks. A syncline is concave upward.

TEMPERATURE INVERSION LAYER. See surface-based inversion.

TOTAL SUSPENDED PARTICULATES. That portion of all particulate matter in the atmosphere consisting of particles too small to settle out.

TRANSMISSIVITY. In an aquifer, the rate at which water at the prevailing temperature is transmitted through a unit width under a unit hydraulic gradient.

UNDERSTORY. A layer of vegetation underlying a layer of taller plants.

WILDINGS. Seedlings or young plants naturally produced outside a nursery and dug for use as planting stock.