

7.0 Glossary

Air quality related values (AQRVs)	Resources sensitive to air quality and include vegetation, soils, water, fish and wildlife, and visibility.
Ambient Noise	Background noise. The total volume of noise produced from nearby and distant sources.
Anthropogenic	Relating to, or resulting from the influence of human beings on nature
Antiquity	The ancient past, especially the period before the Middle Ages.
Aquifer	Any geological formation containing or conducting ground water, especially one that supplies the water for wells, springs, etc.
Archaic	The time period between 6000 B.C. to around A.D. 0.
Atmospheric Deposition	The process by which chemical substances, such as pollutants, are transferred from the atmosphere to the earth's surface.
Bituminous coal	Black coal having a relatively high volatile content. It burns with a characteristically bright smoky flame.
Brownfield	A term used in urban planning to describe land previously used for commercial uses or industrial purposes. Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.
Caliche	A sedimentary rock, a hardened natural cement of calcium carbonate that binds other materials such as gravel, sand, clay, and silt.
Cambrian	The geologic span of time between 570 and 505 million years ago.
Caliche	A sedimentary rock, a hardened natural cement of calcium carbonate that binds other materials such as gravel, sand, clay, and silt.
Carbonaceous	Consisting of or containing carbon or its compounds.
Carrying Capacity	The maximum population or level of activity that can be supported without degradation of the habitat or the population.
Cenozoic	The geologic span of time between 66 million years ago to the present.
Classified Segment	A waterbody or portion of a waterbody that is defined individually by TCEQ in state surface water quality standards.
Clastic	Denoting rocks composed of broken pieces of older rocks.
Coal Combustion Residue (CCR)	The ash and other by-products from burning coal in power plants.
Confluence	The junction of two rivers, primarily rivers of approximately equal width.
Cretaceous	The geologic span of time between 144 and 66 million years ago.

Critical Habitat	Habitat that is present in minimum amounts and is the determining factor in the potential for population maintenance and growth.
Criteria Pollutants (Air)	Six commonly found air pollutants for which the USEPA sets standards. USEPA develops human health-based and/or environmentally based science-based guidelines for setting allowable levels of these pollutants. The six are: particle pollution, ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead.
Cumulative Effects	The combined environmental impacts that accrue over time and space from a series of similar or related individual actions, contaminants, or projects. Although each action may seem to have a negligible impact, the combined effect can be significant. Included are activities of the past, present, and reasonably foreseeable future; synonymous with cumulative impacts.
dB Decibel	Unit of measure of sound pressure and sound power levels. Expresses relative difference in power between two signals equal to 10 times the logarithm (base 10) of the ratio of the two levels.
dBA	A-weighting. The most commonly used frequency weighting measure; simulates human sound perception and correlates well with human perception of the annoying aspects of noise.
Deposition	The geological process in which sediments, soil and rocks are added to a landform or land mass.
Depressurization Wells	Wells installed to prevent pit floor heaving.
Dewatering Wells	Well installed to provide for pit wall stability and safe working conditions.
Direct Impacts	Impacts that are caused by the action and occur at the same time and place (40 CFR 1508.7); synonymous with direct effects.
Discharge	The volume of water flowing past a point per unit time, commonly expressed as cubic feet per second, gallons per minute, or million gallons per day.
Disturbed Area	An area where natural vegetation and soils have been removed.
Drainage	The natural channel through which water flows some time of the year; natural and artificial means for affecting discharge of water as by a system of surface and subsurface passages.
Drawdown	The lowering of the water level in a well as a result of withdrawal; the reduction in head at a point caused by the withdrawal of water from an aquifer.
Ecoregion	A major ecosystem defined by distinctive geography and receiving uniform solar radiation and moisture.
Endangered Species	Any species in danger of extinction throughout all or a significant portion of its range. Plant or animal species identified by the Secretary of the Interior as endangered in accordance with the 1973 ESA.

Ecocene Epoch/Series	The geologic span of time between 37.5 to 54 million years before present.
Embankment	A wall or bank of earth or stone built to prevent a river flooding an area.
Ephemeral Stream	An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.
Evapotranspiration	The process by which water is transferred from the land to the atmosphere by evaporation from the soil and other surfaces and by transpiration from plants.
Fault	A fracture in rock units along which there has been displacement.
Flocculant	A reagent added to water to aggregate minute suspended particles so that they may precipitate out of suspension.
Floodplain	That portion of a river valley, adjacent to the channel, that is built of sediments deposited during the present regimen of the stream and that is covered with water when the river overflows its banks at flood stages.
Fluvial Environment	River environment.
Fluvial Geomorphology	The study of landform evolution related to rivers.
Forage	Vegetation used for food by wildlife, particularly big game wildlife, and domestic livestock.
Forb	Any herbaceous plant other than a grass, especially one growing in a field or meadow.
Fugitive Dust	Dust particles suspended randomly in the air from road travel, excavation, and rock loading operations.
Geomorphology	The scientific study of physical landforms and the processes that formed them.
Growth Media	Suitable material that may be used in place of topsoil for reclamation purposes.
Groundwater Gradient	Change in head per unit of distance measured in the direction of flow.
Groundwater Recovery	An increase in groundwater levels such that the groundwater elevations rise above initial baseline groundwater elevations. Used to refer to an increase in water levels following drawdown.
Groundwater Table	The surface between the zone of saturation and the zone of aeration; that surface of a body of unconfined groundwater at which the pressure is equal to that of the atmosphere.
Herpetofauna	A term referring to reptiles and amphibians. This group includes frogs, toads, turtles, salamanders, snakes and lizards.
Hertz (Hz)	Unit of frequency of one cycle per second.
Historic	The time period after A.D. 1600.

Holocene	Geologic span of time from 11.7 thousand years ago to present.
Homogeneous	Similar or of the same kind.
Hydraulic Conductivity	The capacity of a rock to transmit water. It is expressed as the volume of water at the existing kinematic viscosity that will move in unit time under a unit hydraulic gradient through a unit area measured at right angles to the direction of flow.
Hydraulic Gradient	See groundwater gradient.
Hydraulic Head	The height of the free surface of a body of water above a given subsurface point.
Hydrologic Unit Code (HUC)	A way of identifying all of the drainage basins in the United States in a nested arrangement from largest (Regions) to smallest (Cataloging Units).
Impact	A modification in the status of the environment brought about by the Proposed Action or an alternative.
Impaired Waterbodies	Waterbodies that have water quality characteristics that no longer support designated or presumed uses.
Impoundment	A body of water confined within an enclosure, such as a reservoir.
Indirect Impacts	Impacts that are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable (40 CFR 1508.8); synonymous with indirect effects.
Infiltration	The movement of water or some other liquid into the soil or rock through pores or other openings.
Infrastructure	The basic framework or underlying foundation of a community or project, including road networks, electric and gas distribution, water and sanitation services, and facilities.
Intactness	The integrity of visual order in the natural and man-build landscape, and the extent to which the landscape is free from visual encroachment.
Interburden	Non-ore grade material interlayered with ore or located within or horizontally adjacent to the ore such that it must be removed in the process of extracting ore grade material.
Interfluve	The region of higher land between two rivers that are in the same drainage system.
Intermittent Stream	An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.
Invertebrate	An animal without a backbone.
Irretrievable	Applies primarily to the lost production of renewable natural resources during the life of the project.
Irreversible	Applies primarily to the use of nonrenewable resources, such as minerals, cultural resources, wetlands, or to those factors that are renewable only over long time spans, such as soil productivity. Irreversible also includes loss of future options.

Jurassic	The span of time between 208 and 144 million years ago.
Jurisdictional Wetland	A wetland area identified and delineated by specific technical criteria, field indicators, and other information for purposes of public agency jurisdiction. The public agencies that administer jurisdictional wetlands are the USACE, USEPA, USFWS, and NRCS.
Lacustrine	Permanently flooded and intermittent lakes and reservoirs that typically have extensive areas of deep water
Late Prehistoric	The time period between approximately A.D. 700 – 1600.
Lignite	A low-grade form of coal; subbituminous coal.
Limnetic	Open waters of lakes and reservoirs
Lithic Scatter (Archaeology)	A discrete grouping of flakes of stone created as a byproduct in the tool making process. Often includes flakes used as tools as well as formal stone tools, such as projectile points, knives, or scrapers.
Lithologic Units	Rock formations.
Level of Service (LOS) (Transportation)	A standardized method of qualitatively measuring the operational conditions of traffic flows on roadways and the perception of those conditions by motorists and passengers.
Macrofossils	A fossil large enough to be observed by direct inspection.
Macroinvertebrate	Animals lacking a spinal cord that can be seen without magnification.
Microfossils	Fossils that can be seen with the use of a microscope.
Micromhos per Centimeter	A unit of measure for electrical conductivity in water. Higher values reflect greater levels of dissolved conductors, such as sodium, calcium, or magnesium salts.
Mitigate, Mitigation	To cause to become less severe or harmful; actions to avoid, minimize, rectify, reduce or eliminate, and compensate for impacts to environmental resources.
Monitor	To systematically and repeatedly watch, observe, or measure environmental conditions in order to track changes.
National Environmental Policy Act (NEPA)	The NEPA of 1969; the national charter for Protection Act protecting the environment. NEPA establishes policy, sets goals, and provides means for carrying out the policy. Regulations from 40 CFR 1500-1508 implement the act.
National Register of Historic Places (NRHP)	A list, maintained by the NPS, of areas that have been designated as being of historical significance.
Native American Consultation Database (NACD)	A tool for identifying consultation contacts for Indian tribes and Native Hawaiian organizations developed by the NPS.
Native Species	Plants that originated in the area in which they are found (i.e., they naturally occur in that area).

Nephelometric Turbidity Unit	A unit measuring the dispersion of a beam of light passed through a sample of water. Silt and other fine, suspended particles disperse the light. Higher values imply (qualitatively) more suspended material.
National Geodetic Vertical Datum of 1929 (NGVD)	The National geodetic vertical datum of 1929 is a vertical geodetic datum formerly called sea level datum of 1929 or “mean sea level.” It is based on sea level averages at 26 points along the U.S. and Canadian coasts over a period of many years.
Noise	Unwanted sound; one that interferes with one’s hearing of something; a sound that lacks agreeable musical quality or is noticeably unpleasant.
Outfalls	Discharge points from the drainage control system to downstream drainages.
Overburden	Material that must be removed to allow access to an orebody, particularly in a surface mining operation.
Oxidize	Having undergone a chemical reaction with oxygen.
Paleontology	The study of fossils; what fossils tell us about the ecologies of the past, about evolution, and about our place, as humans, in the world. Information about interrelationship between the biological and geological components of ecosystems over time.
Palustrine	Wetlands which include inland marshes and swamps as well as bogs, fens, tundra and floodplains.
Pangea	A supercontinent that existed during the late Paleozoic and early Mesozoic eras. It formed approximately 300 million years ago and then began to break apart after about 100 million years.
Parent Material	Unconsolidated organic and inorganic mineral material in which soil forms.
Passerine	Referring to birds in the order Passeriformes, which includes perching birds.
Peak Flow	The greatest flow attained during winter snowmelt or during a large precipitation event.
Perennial Stream	A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.
pH	The measure of the acidity or basicity of a solution.
Physiographic	Based on terrain texture, rock type, and geologic structure and history.
Plastic Limit (Soils)	The minimum water mass content at which a small sample of soil material can be deformed without rupture.
Pleistocene	Geologic span of time occurring 1.8 million years ago and lasted until about 11,700 years ago.

Potentiometric Surface	A surface that represents the total head in an aquifer; that is, it represents the height above a datum plane at which the water level stands in tightly cased wells that penetrate the aquifer.
Prime Farmland	Prime farmland is a designation assigned by U.S. Department of Agriculture defining land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these land uses.
Pseudokarst	A topography that resembles karst but that is not formed by the dissolution of limestone; usually a rough-surfaced lava field in which ceilings of lava tubes have collapsed.
Pyrite	A shiny yellow mineral consisting of iron disulfide and typically occurring as intersecting cubic crystals.
Radionuclide	An unstable form of a chemical element that radioactively decays, resulting in the emission of nuclear radiation.
Raptor	A bird of prey, including eagles, hawks, falcons, osprey, and owls.
Reclamation	The process by which lands disturbed as a result of human activity are restored to the original condition.
Recovery (Groundwater)	Used to refer to an increase in water levels following drawdown. An increase in groundwater levels such that the groundwater elevations return to approximate initial baseline groundwater elevations.
Recurrence Intervals	Long-term averages that reflect the probability (based on 100 percent) of an event happening in any given year.
Reducing	To change (an element or ion) from a higher to a lower oxidation state.
Residual Effects	Remaining results or conditions after project and mitigation completion.
Right-of-way	Strip of land or corridor through which a power line, access road, or maintenance road would pass.
Riparian	Situated on or pertaining to the bank of a river, stream, or other body of water. Riparian is normally used to refer to plants of all types that grow along streams, rivers, or at spring and seep sites.
Runoff	That part of precipitation that appears in surface streams; precipitation that is not retained on the site where it falls and is not absorbed by the soil.
Sediment	Material suspended in or settling to the bottom of a liquid. Sediment input comes from natural sources, such as soil erosion and rock weathering, as well as construction activities or anthropogenic sources, such as forest or agricultural practices.
Selective Handling	Procedures for separating suitable growth media from overburden and interburden sources.
Short Ton	2,000 pounds.
Siemen	Per meter. A unit of electrical conductivity.

Smectitic	A soil that is made up of a type of clay mineral (e.g., montmorillonite) that undergoes reversible expansion on absorbing water.
Soil Horizon	A layer of soil material approximately parallel to the land surface differing from adjacent genetically related layers in physical, chemical, and biological properties.
Soil Profile	A vertical section of the soil through all its horizons and extending into the parent material or to a depth of 60 inches.
Spoils	The material that lies above an area of economic or scientific interest. In mining, it is most commonly the rock, soil, and ecosystem that lies above a coal seam or ore body.
Stratigraphy	Form, arrangement, geographic distribution, chronological succession, classification, and relationships of rocklayers.
Terrace	A nearly level strip of land with a more or less abrupt descent along the margin of the sea, a lake, or a river.
Terrestrial	Species living or growing on land or on or in the ground; not aquatic, arboreal, or epiphytic
Tertiary	The geologic span of time between 65 and 3 to 2 million years ago.
Texas Pollutant Discharge Elimination System (TPDES)	A part of the Clean Water Act that requires point source dischargers to obtain Elimination System permits. In Texas, these permits are referred to as TPDES permits and are administered by the state.
Threatened Species	Any species of plant or animal that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
Topography	The form and structure of the surface of land.
Total Dissolved Solids	Total amount of dissolved material, organic or inorganic, contained in a sample of water.
Transmissivity	The rate at which water of the prevailing kinematic viscosity is transmitted through a unit width of an aquifer under a unit hydraulic gradient; it equals the hydraulic conductivity multiplied by the aquifer thickness.
Underburden (Groundwater)	Geologic layers that are located below the geologic unit of interest.
Understory	Underlying plants (smaller trees, saplings, shrubs) that grow below the larger trees in a forest.
Unity	The visual coherence and harmony of the landscape when considered as a whole.
Vertebrate	An animal of a large group distinguished by the possession of a backbone or spinal column, including mammals, birds, reptiles, amphibians, and fishes.
Viewshed (Visual)	The area from which a proposed project area can be seen.

Visual Resource	The composite of basic terrain, geologic features, water features, vegetation patterns, and land use effects that typify a land unit and influence the visual appeal the unit may have for viewers.
Visual Sensitivity	A relative measure of the degree of concern by the viewer for changes in the landscape.
Vividness	The memorability of the visual impression received from contrasting landscape elements as they combine to form a striking and distinctive visual pattern.
Water Table	Level of water in the saturated zone at which the pressure is equal to the atmospheric pressure.
Waters of the United States	A jurisdictional term from Section 404 of the CWA referring to water bodies such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. The use, degradation, or destruction of these waters could affect interstate or foreign commerce.
Watershed	A region or area bounded peripherally by a water parting divide, and draining ultimately to one particular location, usually a watercourse or body of water.
Wetlands	Areas that are inundated by surface or groundwater with a frequency sufficient to support (and under normal circumstances do or would support) a prevalence of vegetation or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction.
Wind Rose (Air)	Weather map showing the frequency and strength of winds from different directions.