

References

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Glossary of Technical Terms, Acronyms, Abbreviations, and Measurement Equivalents

12.0 GLOSSARY OF TECHNICAL TERMS, ACRONYMS,
ABBREVIATIONS AND MEASUREMENT EQUIVALENTS

12.1 DEFINITION OF TERMS

Note: The terms defined here have been marked with an asterisk (*) throughout the text.

| <u>Term</u> | <u>Definition</u> |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alluvium | Clay, silt, sand, gravel, and similar unconsolidated detrital material deposited recently (in geologic time) by a stream or other body of running water in the bed of the stream or on its flood plain or delta, or as a cone or fan at the base of a mountain slope. |
| Alevin | A newly hatched salmon still attached to the yolk sac. |
| Anadromous | Fish (like salmon) which hatch and often rear for varying periods in freshwater, migrate to the sea for one or more years of accelerated growth, and return to freshwater to spawn. |
| Andesite | A dark-colored, fine-grained extrusive rock. |
| Antecedent Moisture Condition | The amount of moisture present in the soil at the beginning of a runoff period. |
| Anticline | Layered rock strata that have been folded into an arch-shaped structure in which the layers incline away from a central axis. (opposite of syncline). |
| Aufeis | Massive surface ice formed by successive freezing sheets of water seeping onto ice cover from stream banks, under the ice or from surface runoff . |
| Base Flow | Sustained or fair-weather flow of a stream. |

| <u>Term</u> | <u>Definition</u> |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Batholith | A generally discordant, plutonic mass that has more than 100 square kilometers (40 square miles) in surface exposure and is composed predominately of medium to coarse rocks of granodiorite and quartz monzonite composition. |
| Benthic | Pertaining to that which occurs at the bottom of water bodies; especially applies to organisms living on or in bottom sediments. |
| Borrow | Construction materials such as sand and gravel. |
| Box Cut | Initial excavation for mine development. |
| Breccia | Coarse-grained clastic rock composed of large (greater than sand size), angular, and broken rock fragments that are cemented together in a fine-grained matrix. |
| Cache | Food storage pile. |
| Confined Ground Water | An aquifer in which the water is under pressure between two impermeable layers of subsurface material such as rock or clay. |
| Deltaic Deposits | Sedimentary deposits laid down in a delta, characterized by well- developed local cross-bedding and by a mixture of sand, clay, and the remains of brackish water organisms and organic matter. |
| Detritivore | Animals which feed on decaying material, especially at the bottom of water bodies. |
| Embayment Deposits | Materials deposited in a deep recess or indentation in a shoreline; generally fine-grained materials such as clay, silt, and sand. |

| <u>Term</u> | <u>Definition</u> |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Epibenthic | That which occurs on the surface of sediments at the bottom of water bodies. |
| Epibiotic | Pertaining to organisms living on the surface of bottom sediments. |
| Escapement | The number of anadromous fish which return to freshwater streams and successfully spawn. |
| Estuarine Deposits | A sedimentary deposit laid down in the brackish water of an estuary, characterized by fine-grained sediments (chiefly clay and silt) of marine and fluvial origin mixed with a high portion of decomposed terrestrial organic matter. |
| Extrusive Rocks | Rocks that have been ejected onto the surface of the earth; e.g., lava flows, volcanic ash. |
| Facies | Any observable attribute or attributes (e.g. , overall appearance, composition, or conditions of formation) of one part of a rock as contrasted with another or several other parts of the same rock. |
| Fluvial Deposits | Sedimentary deposits consisting of material transported by, suspended in, or laid down by a river or stream. |
| Granodiorite | Coarse-grained plutonic rocks containing quartz, plagioclase, and potassium feldspar, with biotite, hornblende, or, more rarely, pyroxene. |
| Heuristic | Providing aid or direction in the solution of a problem but otherwise unjustified or incapable of justification. |
| Igneous | Rock which has solidified from molten lava. |

| <u>Term</u> | <u>Definition</u> |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Infauna | Community of organisms which live within sediments at the bottom of water bodies. |
| Interburden | Soil or other material lying between coal seams. |
| Intrusive Rocks | Rocks emplaced by the intrusion of lava into pre-existing rocks. |
| Loess | An unconsolidated, homogeneous blanket deposit of fine-grained materials, predominately composed of silt. |
| Moraine | A mound, ridge, or other distinct accumulation of unsorted unstratified glacial drift, predominately till, deposited chiefly by direct action of glacial ice. |
| Natality | Birthrate. |
| Orographic | Associated with or induced by the presence of mountains. |
| Overburden | Soil, rock, or other material overlying the upper most coal seam. |
| Palustrine | Pertaining to materials deposited in marshes. |
| Periphyton | Organisms, including algae, which live attached to underwater surfaces. |
| Piezometric Surface | An imaginary surface representing the static head of ground water and defined by the level to which water will rise in a well. A water table is a particular piezo- metric surface. |

| <u>Term</u> | <u>Definition</u> |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Plutonic Rocks | Rocks formed at a considerable depth by crystallization of magma or by chemical alteration; characteristically medium- to coarse-grained and of granitoid texture. |
| Primary Productivity | Pertaining to organisms such as green plants which have the ability to use light and nutrient energy to manufacture food. |
| Pyroclastic Rocks | Rocks that are composed of materials fragmented by volcanic explosion; characterized by a lack of sorting and variability in the size of individual pyroclasts. |
| Recharge | Absorption and addition of water to the zone of saturation. |
| Redd | A gravel spawning nest constructed by salmon. |
| Richter Magnitude | The range of numerical values of earthquake magnitude. |
| Riparian | Located on the bank of a water body. |
| Riprap | A layer of large, broken rock placed together irregularly to prevent erosion of embankments , causeways, or other surfaces. |
| Rut | Mating season, especially for big game animals such as moose. |
| Seismic Risk Zone | One of the zones identified in the Uniform Building Code which is used to determine building construction requirements. |
| Series | Composed of soils having similar arrangements of horizons and having, within certain limits, similar physical and chemical properties. |
| Splitter-Hopper | A hopper facility capable of directing coal to more than one destination. |

| <u>Term</u> | <u>Definition</u> |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stamukhas | Sea-ice that has been built up (thickened) by addition of layers of sea-ice being deposited during higher tides over sea-ice layers that have frozen to a tidal flat during earlier lower tides. |
| Stringer | A very thin, filamentous vein of ore. |
| Sub-bituminous | A black coal intermediate in rank between lignite and bituminous coals; higher carbon and lower moisture content than lignite. |
| Succession | Changes in the plant communities composing an ecosystem as the ecosystem evolves from one type to another, e.g. wetlands becoming grassy meadows. |
| Sump | A pit which collects water to be pumped at the bottom of the mine. |
| Syncline | Layered rock strata that have been folded into a trough-shaped structure in which the layers incline towards a central axis; opposite of an anticline. |
| Unconformity | A substantial break or gap in the geological record where a rock unit is overlain by another unit that is not next in stratigraphic succession. |
| Volcanic Rocks | Generally finely crystalline or glassy igneous rock resulting from volcanic action at or near the Earth's surface, either ejected explosively or extruded as lava. |

12.2 AGENCY ACRONYMS AND ABBREVIATIONS

Federal Agencies

| | |
|-------|-------------------------------------------|
| ACHP | Advisory Council on Historic Preservation |
| BLM | Bureau of Land Management |
| CEQ | Council on Environmental Quality |
| corps | Army Corps of Engineers |
| DA | Department of the Army |
| DOI | Department of the Interior |

| | |
|------------|-------------------------------------------------------|
| EPA | Environmental Protection Agency |
| FWS | Fish and Wildlife Service |
| MSHA | Mining Safety and Health Administration |
| NMFS | National Marine Fisheries Service |
| NOAA | National Oceanographic and Atmospheric Administration |
| NPS | National Park Service |
| NWS | National Weather Service |
| USGS | United States Geological Survey |

State of Alaska Agencies

| | |
|------------------|----------------------------------------------------------------------|
| ADF&G | Alaska Department of Fish and Game |
| AEIDC | University of Alaska, Arctic Environmental Information & Data Center |
| DEC | Department of Environmental Conservation |
| DGGS | Division of Geological and Geophysical Survey |
| DNR | Department of Natural Resources |
| DOT/PF | Department of Transportation & Public Facilities |
| SHPO | State Historic Preservation Office |

Other

| | |
|--------------|---------------------------------------------------------|
| ANCSA | Alaska Native Claims Settlement Act of 1971 |
| ANILCA | Alaska National Interest Lands Conservation Act of 1980 |
| ASMCRA | Alaska Surface Mining Control and Reclamation Act |
| BACT | Best Available Control Technology |
| CINA | Cook Inlet Native Association |
| CIRI | Cook Inlet Region, Inc. |
| KLM | Kodiak Lumber Mill |
| KPB | Kenai Peninsula Borough |
| NAAQS | National Ambient Air Quality Standards |
| NEPA | National Environmental Policy Act |
| NPDES | National Pollutant Discharge Elimination System |
| NSPS | New Source Performance Standards |
| NVT | Native Village of Tyonek |
| ORV | Off-road Vehicles |
| PSD | Prevention of Significant Deterioration |
| ROD | Record of Decision |
| SPCC | Spill Prevention, Control and Countermeasure Plan |
| TNC | Tyonek Native Corporation |
| VQO | Visual Quality Objective |
| VRM | Visual Resources Management |

12.3 METRIC/ENGLISH MEASUREMENT, ABBREVIATIONS AND EQUIVALENTS

| <u>Metric Unit</u> <u>(Abbrev.)</u> | <u>Equivalent</u> | | <u>English Unit</u> <u>(Abbrev.)</u> |
|-----------------------------------------------|--------------------------|------------------------|--------------------------------------------------|
| centimeter (cm) | 2.54 cm | = 1 in | inch (in) |
| meter (m) | 0.3048 m | = 1 ft | foot (ft) |
| kilometer (km) | 1.6093 km | = 1 mi | mile (mi) |
| hectare (ha) | 0.4047 ha | = 1 ac | acre (ac) |
| square kilometer (km ²) | 2.590 km ² | = 1 mi ² | square mile (mi ²) |
| liter (l) | 3.78541 | = 1 gal | gallon (gal) |
| cubic meter (m ³) | 0.0283 m ³ | = 1 ft ³ | cubic feet (ft ³) |
| cubic meter (m ³) | 0.7646 m ³ | = 1 yd ³ | cubic yard (yd ³) |
| cubic dekameter (dam ³) | 1.2335 dam ³ | = 1 ac-ft | acre-foot (ac-ft) |
| cubic meter per second (m ³ /s) | 0.0283 m ³ /s | = 1 ft ³ /s | cubic feet per second (ft ³ /s) |
| kilogram (kg) | 0.4536 kg | = 1 lb | pound (lb) |
| metric ton (Mt) | 0.9072 Mg | = 1 ton | short ton (2,000 lb) |
| meter per second (m/s) | 0.5144 m/s | = 1 knots | knot (knot) |
| meter per second (m/s) | 0.3048 m/s | = 1 ft/s | feet per second (ft/s) |
| miligram per liter (mg/l) | 1.0 mg/l | = 1 ppm | part per million (ppm) |
| degrees Celsius (°C) | (1.8x°C) + 32 = °F | | degrees Fahren- heit (°F) |

12.4 OTHER MEASUREMENTS AND ABBREVIATIONS

acre-feet (ac-ft)
 barrels (bbls)
 Before Present (B.P.)
 decibel level A (dbA)
 dead weight ton (dwt)
 megawatt (MW)
 Kilovolt (KV)
 parts per billion (ppb)
 parts per million (ppm)
 gallons per day (gpd)
 milliequivalents per liter (meq/l)
 nannometric turbidity unit (NTU)