

Appendix B

Glossary of Selected Terms

Stantec

SISSON PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REPORT

GLOSSARY

Term	Definition
acute exposure limit	The amount or dose of a chemical that can be tolerated by humans without evidence of adverse health risks on a short-term basis.
air contaminant emissions	For stationary sources, the release or discharge of a contaminant from a facility or operation into the ambient air either by means of a stack or as a fugitive dust, mist or vapour.
airshed	The atmospheric environment above some reference point
ambient sound	All-encompassing sound that is associated with an outdoor environment, usually a composite of sounds from many sources near and far. Ambient noise is the unwanted component of this sound.
ammonium paratungstate (APT)	Produced from separating tungsten from its ore, it will be will be produced by the Project on-site as an added-value end product.
anthropogenic	Resulting from the influence of humans on nature.
aquatic	Refers to organisms (plants, animals, bacteria), that are found in water. This term can also refer to the physical environment related to water (habitat).
aquifer	A geological formation, group of formations or part of a formation that contains sufficient saturated permeable material to yield economical quantities of groundwater to wells or springs.
Archaeological Field Research Permit	A permit granted to a professional archaeologist, through application to Archaeological Services, and necessary under legislation to undertake archaeological field work and HRAs in the Province of New Brunswick.
artesian well	A well in a confined aquifer in which the water in the well rises higher than the top of the aquifer because of confining pressure.
attenuation	The reduction of sound intensity by various means (e.g., absorption in air, geometrical spreading, or topographic barriers).
avian	Pertaining to or derived from birds.
a-weighted decibel (dB _A)	Logarithmic unit of sound intensity; 10 times the logarithm of the ratio of the sound intensity to the reference A-weighted scale, which has the same frequency response as the human ear.

Term	Definition
A-weighting	The weighting network used to account for changes in level sensitivity as a function of frequency, with the objective of simulating human sensitivity to different frequencies. The A-weighting network de-emphasizes the high (6.3 kHz and above) and low (below 1 kHz) frequencies, and emphasizes the frequencies between 1 kHz and 6.3 kHz, in an effort to simulate the relative response of the human ear.
background sound	All-encompassing sound of a given environment without the sound source of interest.
bankfull (width, depth)	Refers to the channel forming flows, where the watercourse is filled just to its banks. Bankfull discharge can be estimated using width to depth ratios.
barren rock	Rock excavated from the open pit that does not contain the target minerals.
baseflow	Flow into watercourses from deep and shallow sub-surface flows.
baseline	Background, pre-activity, pre-construction, or pre-Project environmental conditions.
bioaccumulation	A term used to describe the process by which chemicals are accumulated in an organism directly from exposure to water or soil.
bioavailability	The amount of an exposure dose that reaches the circulatory system.
biodiversity	The number and variety of organisms found within a specified geographic region.
biomagnification	The term generally refers to the sequence of processes that result in higher concentrations of chemicals in organisms at higher levels in the food chain (at higher trophic levels). These processes result in an organism having higher concentrations of a chemical than is present in the organism's food.
biota	The organisms, including animals, plants, fungi, and micro-organisms, found in a given area.
carcinogen	A chemical directly involved in the promotion of cancer.
carnivore	An organism that eats animals.
Contaminants of Potential Concern (COPC)	Chemicals which have the potential to be released in substantive quantities or elevated concentrations from sources associated with the Project, or which, because of their toxicological properties, are considered to be of concern.

Term	Definition
<i>circa</i>	About (with respect to an approximate date)
claim block	The mineral claim block within which HDI/Northcliff has rights of mineral exploration.
climate	Defined as a description of the regularities and extremes in weather conditions in a particular geographical location over a certain period. Usually refers to long term trends in weather for time periods which may range from months to centuries, or the more widely recognised 30-year timeframe as advocated by the World Meteorological Organisation (WMO)
climate change	The term climate change is used to refer to changes in the earth's climate, which can be caused both by natural forces and human activities. Most commonly associated with global warming and the global greenhouse effect, which highlight discernable changes to the earth's climate, (<i>i.e.</i> , increasing temperatures, due to man-made activities and processes).
cold water habitat	Suitable year round for brook trout and Atlantic salmon (<i>e.g.</i> , Bird and Sisson brooks).
cool water habitat	Not suitable year round for brook trout, but is suitable year round for Atlantic salmon (<i>e.g.</i> , Napadogan Brook).
colluvial	A loose deposit of rock debris accumulated through the action of gravity at the base of a cliff or slope.
Comprehensive Review	A detailed environmental impact assessment to assess the nature and significance of potential environmental impacts of an undertaking under the New Brunswick <i>Environmental Impact Assessment Regulation – Clean Environment Act</i> . A Comprehensive Review is undertaken following a Determination Review, when it is determined that a more detailed environmental impact assessment is required.
Concentration Ratio (CR)	The ratio between the predicted or actual concentration of a contaminant in air and its tolerable concentration for humans (as determined by health-based objectives, guidelines and standards established by regulatory agencies).
conglomerate	A type of sedimentary rock in which individual rocks have been cemented together.
Criteria Air Contaminants (CAC)	A group of eight common air contaminants released into the air from various processes including industrial production and fuel combustion. They include total particulate matter (PM), particulate matter less than 10 microns (PM ₁₀), particulate matter less than 2.5 microns (PM _{2.5}), sulphur dioxide (SO ₂), nitrogen oxides (NO _x , expressed as NO ₂), carbon monoxide (CO), and ammonia (NH ₃). Abbreviated in this document as CAC.

Term	Definition
cumulative environmental effects	As defined in the <i>Canadian Environmental Assessment Act (CEAA)</i> , the environmental effects that are likely to result from a project in combination with other projects or activities that have been or will be carried out.
decibel	One tenth of a bel. A logarithmic measure of the ratio of any measured physical quantity to a reference quantity, commonly used in the measurement of sound. The decibel provides the possibility of representing a large span of signal levels in a simple manner as opposed to using the basic unit of linear pressure, Pascal. The difference between the sound pressure level for silence versus a loud sound is a factor of 1,000,000:1 or more, therefore it is less cumbersome to use a small range of equivalent values: 0 to 130 decibels.
deciduous	Sheds all leaves annually.
dilution	The process of making weaker or less concentrated.
drainage basin	The area of land from which surface water run-off drains into lakes, streams, reservoirs or other bodies of water.
drawdown	The change in water level (between the static water level and the surface of the cone of depression) caused by pumping a groundwater well.
easting	A term used to describe a location within a Universal Transverse Mercator (UTM) zone. The midline of each zone is given an easting value of 500,000 m. A point to the west of the midline has an easting value less than 500,000 m, and a point to the east of the midline has an easting value greater than 500,000 m.
Ecological Risk Assessment (ERA)	A scientific method used to examine the nature and magnitude of risks from the exposure of plants and animals to contaminants in the environment.
Ecoregion	A geographically and ecologically distinct unit of land containing a geographically distinct assemblage of species, natural communities, and environmental conditions.
ecosystem	A spatially defined system including all biological organisms and abiotic media.
electrofishing	Refers to a common technique used by fisheries scientist that uses direct electrical currents to attract and stun fish for collection.
emission factor	A representative value that relates the quantity of pollutant released to the atmosphere with an activity or input associated with the release of that pollutant.

Term	Definition
emissions	Technically, all solid, liquid, or gaseous discharges from a processing facility, but normally referring to gaseous and particulate air emissions (with solids referred to as residue and liquids as effluent).
Endangered	A species facing imminent extirpation or extinction.
endemic	Restricted to a specific geographic area.
Energy Equivalent Sound Level (L_{eq})	The level of a constant sound over a specific time period that has the same sound energy as the actual (unsteady) sound over the same period, e.g., over a 1 hour period, L_{eq} (1 h) or over a 24 hour period, L_{eq} (24 h).
environment	<p>As defined under CEAA, environment “means the components of the Earth, and includes:</p> <ul style="list-style-type: none"> (a) air, land and water, including all layers of the atmosphere; (b) all organic and inorganic matter and living organisms; and (c) the interacting natural systems that include components referred to in paragraphs (a) and (b).” <p>As defined under the New Brunswick Clean Environment Act, environment “means the air, water or soil.”</p>
Environmental Assessment (EA)	A process to evaluate the potential environmental effects of proposed projects before they are carried out to meet the requirements of the federal Canadian Environmental Assessment Act (CEAA). An EA identifies possible environmental effects, proposes measures to mitigate adverse environmental effects, predicts whether or not there will be significant adverse environmental effects after the mitigation is implemented, and considers the requirements for follow-up.
environmental effect	<p>As defined under CEAA, in respect of a project:</p> <ul style="list-style-type: none"> (a) “any change that the project may cause in the environment, including any change it may cause to a listed wildlife species, its critical habitat or the residences of individuals of that species, as those terms are defined in subsection 2(1) of the Species at Risk Act, (b) any effect of any change referred to in paragraph (a) on <ul style="list-style-type: none"> i). health and socio-economic conditions, ii). physical and cultural heritage, iii). the current use of lands and resources for traditional purposes by aboriginal persons, or iv). any structure, site or thing that is of historical, archaeological, paleontological or architectural significance, or

Term	Definition
	<p>(c) any change to the project that may be caused by the environment whether any such change or effect occurs within or outside Canada."</p> <p>For convenience in the EIA, environmental effect shall be taken to be synonymous to impact as defined below.</p>
environmental effects monitoring (EEM)	<p>This refers to the federal <i>Metal Mining Environmental Effects Regulations (MMER)</i> under the <i>Fisheries Act</i> that requires all metal mines authorized to discharge effluent into receiving waters conduct an environmental effects study. Studies are of the potential effects of effluent on the fish population, on fish tissue and on the benthic invertebrate community in accordance with the requirements and within the periods set out in Schedule 5 of <i>MMER</i>. Results of EEM studies must be submitted to Environment Canada and must also follow the technical guidelines of <i>MMER</i>.</p>
Environmental Impact Assessment (EIA)	<p>New Brunswick's <i>Environmental Impact Assessment Regulation</i> (Regulation 87-83) under the <i>Clean Environment Act</i> provides the legislative framework for proactive environmental planning of proposed undertakings. The purpose of an EIA is to identify the environmental effects associated with development proposals at the planning stages, well in advance of their implementation, so that the potential environmental effects can be considered, avoided or reduced to acceptable levels before they occur. An EIA gives technical specialists from government agencies, including the federal departments of Fisheries and Oceans Canada (DFO), Transport Canada (TC), and Environment Canada (EC), as well as local residents and the general public, a chance to provide their input in the decision-making process regarding specific development proposals. An EIA review (either a Determination Review or Comprehensive Review) must be completed before any undertaking subject to EIA can proceed.</p>
equivalent sound pressure level (L_{eq})	<p>The equivalent continuous level which is a measure of the energy content of a sound over a time period. It gives a single figure expressing the equivalent of a varying level.</p>
evapotranspiration	<p>The sum of evaporation and transpiration from the earth's surface to the atmosphere. It incorporates the loss of water due to free-water evaporation, plant transpiration and soil-moisture evaporation.</p>
existing ambient	<p>All sounds in a given area (includes all natural sounds as well as all mechanical, electrical and other human-caused sounds).</p>
exposure limit	<p>Maximum dose or amount of chemical that a person or ecological receptor can be exposed to for a specified period without experiencing an adverse health outcome.</p>

Term	Definition
fauna	Animal species.
feedstock	A raw material required as an input to an industrial process. In the context of the Project, a feedstock refers to the input material for any of the processing units.
Final Guidelines	The Final Guidelines for an environmental impact assessment issued by the New Brunswick Minister of Environment that establish the issues and environmental components that the environmental impact assessment must address.
fish	As defined in Section 2 of the <i>Fisheries Act</i> , fish include (a) parts of fish, (b) shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals, and (c) the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals
fish bearing watercourse	A watercourse in which water and habitat quality is sufficient to support fish, and where there are no barriers to the upstream passage of fish.
fish habitat	Fish habitat as defined in Section 34(1) of the <i>Fisheries Act</i> includes spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes. Fish habitat will be assumed to include the physical (e.g., substrate/sediment, temperature, flow velocity and volumes, water depth), chemical (e.g., water quality), and biological (e.g., fish, benthic macro-invertebrates, periphyton, aquatic macrophytes) attributes of the Aquatic Environment that are required by fish to carry out life cycle processes
flashy	Refers to flow levels in watercourses that fluctuates quickly and widely following changes in precipitation, stormwater, or snow melt events.
flora	Plant species
fluvial	Landforms or deposits defined and formed by flowing water.
forage	The act of looking or searching for food or provisions.
fossils	Preserved traces or remains of a pre-existing organism of a past geologic age.
fry	Refers to a young fish often just hatched from its egg. For Atlantic salmon this stage of development is also called an Alvin.
fugitive emission	Result from small leaks that while individually very small, can collectively be substantial for large, complex facilities

Term	Definition
geodetic	Relates the geometry of exact positions of points and lines drawn on the earth's surface that make corrections for the curvature of the earth's surface. For example, geodetic elevation of the water surface, usually expressed in metres (m), is the exact vertical position of the waterline on the earth's surface and can be directly compared to other geodetic measurements.
geomorphology	The study of landforms and the processes that created them.
GeoNB-mapped wetland	<p>Wetlands identified on the Service New Brunswick hosted website: http://geonb.snb.ca/geonb/. NBDELG's current approach to the implementation of the New Brunswick Wetlands Conservation Policy as communicated by NBDELG does not require that WAWA permits or compensation be required for wetlands not appearing on this map viewer. The website offers the following disclaimer:</p> <p>"Anyone undertaking an alteration within potential wetland areas that have not been mapped on the Regulated Wetlands Map assumes all risk and liability associated with any adverse effects including but not limited to on and off-site flooding.</p> <p>The Regulated Wetlands Map is intended to indicate the location of regulated wetlands including Provincially Significant Wetlands in the province. It is not intended to be used for legal descriptions or to calculate exact dimensions or area. Neither Environment nor Service New Brunswick makes any representations or warranties, either expressed or implied, as to the accuracy of the information presented and the client assumes the entire risk as to the use of any or all information."</p>
gonads	Refers to the reproductive organs, ovaries and testes.
greenhouse gases (GHG)	Gaseous compounds that inhibit the release of heat from the atmosphere. The greenhouse gases considered in this Study are carbon dioxide (CO ₂), methane (CH ₄), and nitrous oxide (N ₂ O).
half-life	The period of time required for the loss or decay of one-half the original quantity of a substance.
headwater(s)	The upper area of a watershed most commonly first order watercourses that collect run-off from riparian areas. Commonly identified as the source or start of the watercourse.
heptatoxicant	Liver toxicant.

Term	Definition
herbivore	An organism that eats only plants.
heritage resources	Any physical remnants found on top of and/or below the surface of the ground, including the sea floor, that inform us of past human use of and interaction with the physical environment. This includes resources of historical, cultural, archaeological, palaeontological, and architectural significance.
historic period	The period after European arrival in Canada, referring to the time for which written history records are available.
hydraulic conductivity	The volume of water that is transmitted through a unit area of aquifer under a unit decline in hydraulic head (expressed as metres per day per metre of drawdown (m/d or cm/s), and is the transmissivity divided by the aquifer thickness contributing to the well).
hydric soil	A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part.
hydrodynamics	Relates to the motion of fluids (usually water) and the forces that act on solid bodies immersed in fluids.
hydrograph	In the context of this report, it refers to the three dimensional representation of the location and extent of surface water features on the landscape.
hydrology	Study of the properties, distribution and circulation of water.
hydrophytic	Having tendency to grow in wetland conditions.
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.
hypoxic	Deficient in oxygen.
impact	An environmental effect associated with a project or undertaking, as used in the context of an EIA under the New Brunswick <i>Environmental Impact Assessment Regulation</i> . Impact shall be taken to be synonymous to environmental effect as defined previously.
<i>in situ</i>	A Latin term meaning in place or not removed. In general, this refers to artifacts being found in their originally deposited context.
indigenous	Originating and living or occurring naturally in an area or environment.
infiltration	The movement of water from the land surface into the soil.

Term	Definition
intolerant	In the context of aquatic species such as fish, benthic invertebrates or periphyton, this term refers to a lack of tolerance of changes to water quality (temperature, dissolved oxygen (DO), pH, trace elements) where individuals or assemblages these species do not grow well in low (e.g., pH, DO) high (e.g., temperature, mercury) or changing water quality conditions.
invertebrate	A group of organisms that lack a backbone/vertebrae. Insects, and mussels are two examples of organisms from this group.
LC_{50}	Median lethal concentration of a toxic substance or radiation. The concentration required to kill half the members of a tested population.
L_D	L_D is an average sound pressure level over the day time period. In this study the day time period was set at 6:00 to 22:00.
lithology	Refers to both the bulk characteristics or the microscopic description and classification of a rock mass or formation.
L_N	L_N is an average sound pressure level over the night time period. In this study the night time period was set at 22:00 to 6:00.
Local Assessment Area (LAA)	The Local Assessment Area (LAA) is the maximum area within which Project-related environmental effects can be expected or measured with a reasonable degree of accuracy and confidence. The LAA includes the PDA and any adjacent areas where Project-related environmental effects may reasonably be expected to occur.
lodgement till	Material that is pressed to a valley floor when its weight becomes too great to be moved by a glacier.
meteorology	The science of weather and weather forecasting.
mid-grade ore	Rock excavated from the open pit that does contain the target minerals, though not in high enough concentration to make their processing feasible.
mitigation	With respect to a project, refers to the elimination, reduction or control of the adverse environmental effects of the project, including restitution for any damage to the environment caused by such environmental effects through replacement, restoration, compensation or other means.
model calibration	The method by which an independent variable or a number of independent variables are varied in a computer model in order to calibrate a dependant variable.

Term	Definition
monitoring	Periodic or continuous surveillance or testing to determine the characteristics of a substance or the level of compliance with statutory requirements and/or contaminant levels in various media or in humans, plants, and animals.
morphology	Refers to the study of the form or shape of things. In reference to animals such as fish or insects the term refers to the shape and structure of their bodies and limbs (e.g., fins, legs, antenna). In reference to a watercourse, it would relate to the shape and characteristics of the channel.
noise	Noise is defined as unwanted, undesired, or unpleasant sound. A subjective term, as sounds that may be unwanted and undesired by some may be wanted and desirable by others.
non-CAC	Non-criteria air contaminants, that is chemicals of potential concern which are neither criteria air contaminants nor greenhouse gases (e.g., metals).
northing	A term used to describe a location within a UTM zone. Northing values are measured in metres relative to the Equator.
oligotrophic	Referring to environments with low calcium content, generally with low primary productivity and low nutrient content.
omnivorous	Feeding on both meat (animal) and plant tissues.
order of magnitude	The expression “an order of magnitude” refers to a value that is roughly ten times greater than the value against which it is being compared.
overburden	Material in the top later of the earth’s surface.
parameter	A variable that defines a system and can be varied in an experiment to determines its behaviour.
parr	Refers to the first one to three years an Atlantic salmon spends in freshwater. This stage occurs after the fry stage.
peak run-off	The highest recorded flow event for watercourses in the Assessment Area on record, based on precipitation data recorded at the Saint John Airport.
periphyton	Refers to freshwater organisms, usually algae or cyanobacteria, attached to or clinging to plants, rocks and other objects on the bottom of watercourses.
phytotoxicity	Refers to toxic effects on plants.
piscivore	Feeding primarily on fish
potable water	Potable water is water that is fit for drinking by humans and other animals.
potential acid input (PAI)	The difference between deposited acidic anions and basic cations.

Term	Definition
pre-Contact period	The period before European arrival in Canada.
Project	As described herein, the Project is “Sisson Project”. The Project is a project as defined under CEAA and an Undertaking under the New Brunswick <i>Environmental Impact Assessment Regulation</i> .
Project Development Area (PDA)	The Project Development Area (PDA) is the most basic and immediate area of the Project, and consists of the area of physical disturbance associated with the Construction and Operation of the Project. Specifically, the PDA consists of an area of approximately 1,253 hectares that includes: the open pit; ore processing plant; storage areas; TSF; quarry; the relocated Fire Road and new Project site access road; and new and relocated power transmission lines.
Proponent	In the context of the Project, the Proponent is Northcliff Resources Ltd.
Provincially Significant Wetland (PSW)	PSWs are defined as wetlands having provincial, national, or international importance, namely: coastal marshes; wetlands designated under other conservation-based agencies; wetlands that contain species listed under the New Brunswick <i>Endangered Species Act</i> (soon to be replaced with the New Brunswick <i>Species at Risk Act</i>); and wetlands with significant ecological, hydrological function, or social (values) functions.
reach	A section of watercourse of defined length (usually 100 m) in which fish and fish habitat surveys are completed, and water quality measurements are taken.
receptor	The person, plant or wildlife species that may be affected due to exposure to a contaminant.
redd	Refers to the “nest” excavated by a salmon or trout in which to lay their eggs. The female will excavate the redd eggs will be fertilized by the male and then the eggs are buried leaving a noticeable and characteristic depression in the stream bed.
reference area	Refers to a site, station or general area within a scientific study. This area is generally a comparatively undeveloped or unaffected site used for comparison to developed or affected sites in environmental monitoring studies.
Regional Assessment Area (RAA)	The Regional Assessment Area (RAA) is the area within which the Project's environmental effects may overlap or accumulate with the environmental effects of other projects or activities that have been or will be carried out.

Term	Definition
responsible authority	In relation to a project, means a federal authority that is required, pursuant to Subsection 11(1) of CEAA, to ensure that an environmental assessment of the Project is conducted.
run-off	The portion of precipitation that does not infiltrate into the ground surface and flows to surface water bodies.
salmonid	A fish of the salmon family (<i>Salmonidae</i>), a group of fish that includes salmon, trout and char.
Secure	A Secure species is one that is listed or known to be secure (including those designated S4 or S5 by AC CDC, or designated as "Secure" by NBDNR).
sediment	Fragmented material from weathered rocks and organic material that is suspended in, transported by and eventually deposited by water or air.
sedimentary rock	One of the three main rock groups (including metamorphic and igneous rock).
shovel test pit	A 50 cm by 50 cm hand dug hole, dug in areas of elevated archaeological potential, to confirm the presence or absence of archaeological materials.
significance	A measure of the degree to which an environmental effect may be adverse or beneficial.
sinuosity	Refers to the ratio of the watercourse channel length to the length of the valley in which the watercourse occurs. This can also be calculated using the valley slope or grade in relation to the watercourse channel slope.
smolt	This refers to the stage in the Atlantic salmon's life cycle where parr change to a silvery appearance and move downstream and out to saltwater. This stage usually occurs when parr are around 15 cm in length.
sound	A wave motion in air, water, or other media. It is the rapid oscillatory compressional changes in a medium that propagates to distant points.
sound power level (L_w)	The total sound energy radiated by a source per unit time. The unit of measurement is the decibel expressing the ratio of power of the source, in watts to a reference level (conventionally 10^{-12} watts).
sound pressure level (L_p , SPL)	The logarithmic form of sound pressure. In air, 20 times the logarithm (to the base 10) of the ratio of the actual sound pressure to a reference sound pressure (which is 20 micropascals, and by convention has been selected to be equal to the approximate threshold of human hearing). It is also expressed by attachment of the word decibel to the number.
spawn or spawning	This refers to the act of a fish laying its eggs.

Term	Definition
species at risk (SAR)	Species at risk include species that are listed under Schedule 1 of the <i>Species at Risk Act (SARA)</i> as “Extirpated”, “Endangered”, or “Threatened” and/or listed under the New Brunswick <i>Species at Risk Act (NB SARA)</i> as “Extirpated”, “Endangered”, or “Threatened”.
species of conservation concern (SOCC)	Species of conservation concern includes those listed species that are not currently under the protection of <i>SARA</i> (<i>i.e.</i> , are listed as “special concern” in Schedule 1 of <i>SARA</i> ; listed in Schedule 2 or 3 of <i>SARA</i> ; listed as “special concern”, “threatened” or “endangered” by COSEWIC but not yet listed in Schedule 1 of <i>SARA</i>); ranked as “S1”, “S2”, or “S3” in New Brunswick by AC CDC; and/or ranked as “May Be At Risk” or “Sensitive” in New Brunswick by the Canadian Endangered Species Conservation Council (CESCC).
species rank	A provincial rarity ranking assigned for the purpose of setting protection priorities for a species and/or ecological community. This ranking system is used by conservations data centres (CDCs) and natural heritage programs.
stream network, drainage network	Refers to the watercourses within a watershed area that collect and move water downstream.
stream order	Watercourse classification based on size of contributing area (watershed), channel morphology, and discharge. <i>e.g.</i> the smallest headwater streams are first order, when two first order watercourses meet they become second order, when two second order meet they become third order <i>etc.</i>
tailings	Produced by the ore processing process, tailings contain a slurry of water and ore from which the target minerals have been removed.
terrestrial	Living on or in the ground.
terrestrial wildlife species	A terrestrial wildlife species is one that inhabits a terrestrial ecosystem for the majority of its lifecycle.
Threatened	A wildlife species that is likely to become an endangered species if nothing is done to reverse the factors leading to its extirpation or extinction.
tolerant	In the context of aquatic species or communities, refers to tolerance of shade where individuals or assemblages of tree species grow well in low-light conditions or the shade of other plants.
topographic	The configuration of a surface including its relief and the position of its natural and man-made features.

Term	Definition
toxicity reference values (TRVs)	The dose level selected to represent a threshold above which adverse environmental effects to the health of a given type of organism may be expected.
Undertaking	A project, physical works, or activity that requires registration under the New Brunswick <i>Environmental Impact Assessment Regulation</i> . Analogous to project, as defined under <i>CEAA</i> . In the context of this EIA, project is used synonymously and in place of undertaking.
vascular plants	Group of plants including ferns, flowering plants, and conifers.
viscera	Refers to the internal organs of fish.
warm water habitat	Not suitable year round for brook trout or Atlantic salmon (e.g., some McBean Brook tributaries in PDA).
waste rock	Rock excavated from the open pit that is not processed to remove target minerals. Waste rock includes both barren rock and mid-grade ore.
watercourse	As defined under the New Brunswick <i>Clean Water Act</i> , watercourse means the full width and length, including the bed, banks, sides, and shoreline, or any part, of a river, creek, stream, spring, brook, lake, pond, reservoir, canal, ditch or other natural or artificial channel open to the atmosphere, the primary function of which is the conveyance or containment of water whether the flow be continuous or not.
watershed	Refers to an area that drains to a watercourse, generally watersheds are separated by ridges of land that separates water flowing to different rivers basins or seas.
wetland	Land that is transitional between aquatic and terrestrial ecosystems and is covered with water for at least part of the year.
wildlife species	As defined in the federal <i>Species at Risk Act (SARA)</i> , "wildlife species" means a species, subspecies, variety or geographically or genetically distinct population of animal, plant or other organism, other than a bacterium or virus, that is wild by nature and (a) is native to Canada; or (b) has extended its range into Canada without human intervention and has been present in Canada for at least 50 years.
COSEWIC/SARA/NB SARA Status Definitions	
Endangered (E)	A wildlife species facing imminent extirpation or extinction.
Threatened (T)	A wildlife species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction.
Special Concern (SC)	A wildlife species that may become threatened or endangered because of a combination of biological characteristics and identified threats.

Term	Definition
Not at Risk (NAR)	A wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances.
Provincial General Status Rank Definitions (CESCC)	
At Risk	Species for which a formal assessment has been completed, and determined to be at risk of extirpation or extinction. Includes species either listed as "Endangered" or "Threatened" by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), or as Endangered or Regionally Endangered under the NB ESA and accompanying regulations.
May Be At Risk	Species or populations that may be at risk of extirpation or extinction, and are therefore candidates for a detailed risk assessment.
Sensitive	Species which are not believed to be at risk of extirpation or extinction, but which may require special attention or protection to prevent them from becoming at risk.
Secure	Species that are not believed to be "At Risk", "May Be At Risk", or "Sensitive". These were generally species that were widespread and/or abundant.
Status Undetermined	Species for which there is insufficient data, information, or knowledge available to evaluate their status. These are usually species for which there were few documented occurrences in New Brunswick.
Not Assessed	Species known or believed to be present in New Brunswick but which have not yet been assessed.
Exotic	Species that have been introduced to the province as a result of human activity (<i>i.e.</i> , non-native).
Extirpated	Species that are no longer thought to be present in New Brunswick, although they exist elsewhere.
Extinct	Species that are no longer thought to exist anywhere.
Accidental	Vagrants, or species occurring infrequently and unpredictably, for which New Brunswick is outside of their usual range. For NBDNR general status ranks it was used only for birds and dragonflies.
Occurrence Not Verified	Species which have been reported in New Brunswick, but for which there is no documented evidence, or species which are suspected to occur in New Brunswick because they occur in neighbouring provinces or states.

Term	Definition
AC CDC Status Rank Definitions	
S1	Extremely rare: May be especially vulnerable to extirpation (typically 5 or fewer occurrences or very few remaining individuals).
S2	Rare: May be vulnerable to extirpation due to rarity or other factors (6 to 20 occurrences or few remaining individuals).
S3	Uncommon, or found only in a restricted range, even if abundant at some locations (21 to 100 occurrences).
S4	Usually widespread, fairly common, and apparently secure with many occurrences, but of longer-term concern (e.g., watch list) (100+ occurrences).
S5	Widespread, abundant, and secure, under present conditions.
S#S#	Numeric range rank: A range between two consecutive ranks for a species/community. Denotes uncertainty about the exact rarity (e.g., S1S2).
SH	Historical: Previously occurred in the province but may have been overlooked during the past 20-70 years. Presence is suspected and will likely be rediscovered; depending on species/community.
SU	Unrankable: Possibly in peril, but status is uncertain - need more information.
SX	Extinct/Extirpated: Believed to be extirpated from its former range.
S?	Unranked: Not yet ranked.
SA	Accidental: Accidental or casual, infrequent and far outside usual range. Includes species (usually birds or butterflies) recorded once or twice, or only at very great intervals, hundreds or even thousands of miles outside their usual range.
SE	Exotic: An exotic established in the province (e.g., Purple Loosestrife or Coltsfoot); may be native in nearby regions.
SE#	Exotic numeric: An established exotic that has been assigned a rank.

Term	Definition
SP	Potential: Potentially occurs, but no occurrences have been reported.
SR	Reported but without persuasive documentation (e.g., misidentified specimen).
SRF	Reported falsely: Erroneously reported and the error has persisted in the literature.
SZ	Zero: Not of practical conservation concern because there are no definable occurrences, although the species is native and appears regularly. An SZ rank is generally used for long distance migrants that pass through the province occasionally.