

ACRONYMS AND ABBREVIATIONS	
μg	microgram
μS	microsiemens
AEC	Akaitcho Energy Corporation
ARD	acid rock drainage
ARIC	Akaitcho Regional Investment Corporation
ATV	all-terrain vehicle
AVR	flooded area to volume ratio
BC MOE	British Columbia Ministry of Environment
BOD	biological oxygen demand
CCME	Canadian Council of Ministers of the Environment
CEAA	Canadian Environmental Assessment Act
cm	centimetre
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ -eq	carbon dioxide equivalence
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
DAR	Developer's Assessment Report
Dezé	Dezé Energy Corporation Ltd.
DFO	Department of Fisheries and Oceans
DIAND	Department of Indian Affairs and Northern Development
Diavik	Rio Tinto/Aber Resources Diavik Diamond Mine
Ekati	BHP Billiton Ekati Diamond Mine
ELC	ecological land classification
ENR	Energy and Natural Resources
ESMP	environmental and social management plan
FA	flooded area
FI:bw	food intake rate to body weight ratio
FMEA	failure mode effects analysis
FRPA	Federal Real Property Act and Federal Immovables Act
ft	feet
Gahcho Kué	De Beers/Mountain Province proposed Gahcho Kué Mine
GHG	greenhouse gases
GIS	geographic information system

ACRONYMS AND ABBREVIATIONS	
GNWT	Government of Northwest Territories
GWh	gigawatt hour
ha	hectare
HADD	harmful alteration, disruption or destruction
HAZOP	hazards and operability
IBP	international biological program
INAC	Indian and Northern Affairs Canada
ITI	Industry, Tourism & Investment
IUCN	International Union for the Conservation of Nature and Natural Resources
kg	kilogram
km	kilometres
kt	kilotonne
kV	kilovolt
L	litre
m	metres
masl	metres above sea level
m ³ /s	metres cubed per second
masl	metres above sea level
MEC	Métis Energy Company Ltd.
mEq	milliequivalent
MERC	predicted mean mercury burden
mg	milligram
mm	millimetre
Mm ³	million cubic metres
MOI	Memorandum of Intent
MOU	Memorandum of Understanding
MVA	megavolt ampere
MVEIRB	Mackenzie Valley Environmental Impact Review Board
MVLWB	Mackenzie Valley Land and Water Board
MVRMA	Mackenzie Valley Resource Management Act
MW	megawatt
NCPC	Northern Canada Power Commission
NO	nitrogen oxide

ACRONYMS AND ABBREVIATIONS	
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NR	not relevant
NRCan	Natural Resources Canada
NTEC 03	NWT Energy Corporation (03) Ltd.
NTHC	Northwest Territories Hydro Corporation
NTPC	Northwest Territories Power Corporation
NTU	nephelometric turbidity units
NWPA	Navigable Waters Protection Act
NWPP	Navigable Waters Protection Program
NWT	Northwest Territories
NWWG	National Wetlands Working Group
OS	operational statement for construction of overhead lines
PESEA	Preliminary Environmental and Social Effects Assessment
PF	percent flooding
PM _{2.5}	Respirable particulate matter
PPA	Power Purchase Agreements
ppm	parts per million
RC	reference concentration
ROW	right of way
s	second
SARA	Species At Risk Act
Snap Lake	De Beers Canada Mining Inc. proposed Snap Lake Diamond Mine
SO ₂	sulphur dioxide
SSMEC	South Slave Métis Economic Corporation
SVS	South Valley Spillway
SWE	snow-water equivalent
TA	total area
TDI	tolerable daily intake
TDS	total dissolved solids
the Project	the Taltson Expansion Project
TK	Traditional Knowledge
TOC	total organic carbon

ACRONYMS AND ABBREVIATIONS	
TOR	Terms of Reference
TRG	tissue residue guideline
TSP	total suspended particles
TSS	total suspended solids
UAVR	upstream flooded area to volume ratio
UFA	upstream flooded area
UPF	upstream percent flooding
US EPA	United States Environmental Protection Agency
UTA	upstream total area
UVOL	upstream volume
VC	valued component (ecosystem and social)
VEC	valued ecological component
VOL	reservoir volume
WBNP	Wood Buffalo National Park
WCB	Workers Compensation Board
WEMP	Water Effects Monitoring Program
WHO	World Health Organization
WSC	Water Survey Canada
ww	wet weight
WWF	World Wildlife Fund Canada

GLOSSARY	
Ablation moraine	Morainal material deposited from stagnant glacial ice.
Ablation till	Loose, permeable till deposited during the final down-wasting of glacial ice. Lenses of crudely sorted sand and gravel are common.
Abundance	The number of individuals.
Accuracy	The nearness of a measurement to the actual value of the variable being measured.
Acid base accounting	A whole rock analysis whereby acid potential and neutralizing potential are compared to determine a balance.
Acid rock drainage (ARD)	Refers to the outflow of acidic water usually from areas where the earth of specific geochemical characteristics has been disturbed (e.g., usually from abandoned metal mines or coal mines).
Acid soil	A soil having a pH of less than 7.0.
Acidification	The decrease of acid neutralizing capacity in water, or base saturation in soil, caused by natural or anthropogenic processes. Acidification is exhibited as the lowering of pH.
Acidity	Amount of both weak and strong acids expressed as milliequivalents of a strong base necessary to neutralize those acids.
Active ice wedge	An ice wedge that is growing as a result of repeated (but not necessarily annual) winter cracking. Active ice wedges developed in mineral soil occur primarily in areas of continuous permafrost.
Active layer	The layer of ground above the permafrost that thaws seasonally during the summer and refreezes in the fall.
Active-layer failure	A general term referring to several forms of slope failures or failure mechanisms commonly occurring in the active layer overlying permafrost.
Activity budget scan sampling	A common technique used to quantify the activities of individual animals. A group of animals is scanned and the behaviour of each individual is recorded.
Adsorption complex	The group of substances in the soil capable of adsorbing water and nutrients.
Aeration, soil	The process by which air in the soil is replaced by air from the atmosphere. The rate of aeration depends largely on the volume and continuity of pores in the soil.
Aerobic	Having molecular oxygen as part of the environment.
Aeromagnetic	Pertaining to observations made with an airborne magnetometer.
Aggregate	A group of soil particles cohering so as to behave mechanically as a unit.
Aggregated populations	An ecological term for dispersion in which the individuals of a species are closer together than if they were randomly dispersed.
AIDS	Acquired Immune Deficiency Syndrome: The medical condition AIDS represents the terminal phase of infection with HIV. This virus progressively destroys the body's natural immunity. When an infected person's immunity finally fails, a wide variety of infections and cancers may develop. Only then does a person actually have full-blown AIDS.
Air freezing index	The cumulative number of degree-days below 0°C for the air temperature during a given time period.
Air thawing index	The cumulative number of degree-days above 0°C for the air temperature during

GLOSSARY	
	a given period.
Airborne magnetometer	An instrument transported by an airplane and used for measuring variations in the earth's magnetic field.
Alkaline soil	A soil having a pH greater than 7.0.
Alkalinity	A measurement (expressed in milligrams per litre of calcium carbonate) of the capacity of water to neutralize acids. The concentration is measured based on the presence of naturally available bicarbonate, carbonate, and hydroxide ions.
Alluvium, alluvial deposit	A general term for all detrital material deposited or in transit by streams, including gravel, sand, silt, clay, and organic debris, and all variations and mixtures of these.
Altered rock	Rock that has been altered from its original physical or chemical nature through thermal, chemical, or pressure actions.
Ambient air	The surrounding air of the environment, open or outdoor air.
Ambient noise	The pre-existing sound environment of a location, before the introduction of, or in absence of, noise from a specific source which also affects the sound environment of that location.
Ammonia-nitrogen	The overall concentration of nitrogen in both the ionized (NH_4^+) and molecular (NH_3) forms of dissolved ammonia. The ammonia concentration is reported as nitrogen, where the weight of the nitrogen is ignored in the analysis.
Amphibian	A cold-blooded, smooth-skinned vertebrate of the class Amphibia, such as a frog or salamander, that characteristically hatches as an aquatic larva with gills. The larva then transforms into a terrestrial adult.
Anaerobic	Refers to processes which occur in the absence of oxygen; lacking molecular oxygen as part of the environment
Angle	To fish with a hook.
Anion	A negatively charged ion.
Annual home range	The area traversed by animals in its normal activities of food gathering, mating and caring for young. Occasional sallies outside the area, perhaps exploratory in nature, should not be considered part of the home range. An alternative, statistical explanation is the smallest sub-region which accounts for a specified proportion of its total utilization over the course of the year.
Anoxia	The complete depletion of dissolved oxygen (DO) in the aquatic environment.
Anthropogenic	Refers to effects or processes that are derived from human activities, as opposed to effects or processes that occur in the natural environment without human influences.
Apron	Coalesced fans which occur at footslopes. They have a relatively gentle slope at the foot of a steeper slope, and are formed by materials transported from the steeper, upper slope. Deposition of materials typically occurs during extreme storm or runoff events.
Aquatic macrophytes	Aquatic plants that are large enough to be seen by the naked eye. May include submergent (grows underwater) or emergent (grows above the waterline) varieties.
Aquifer	Rock or sediment formation, or portion of, that is saturated and sufficiently permeable to yield significant quantities of water to wells or springs.
Archean	Rocks of the Archeozoic.
Archeozoic	The early part of the Precambrian time.

GLOSSARY	
Arctic small tool tradition	An early Inuit culture (also called Pre-Dorset) characterized by the use of distinctive small tools, usually of light coloured cherts; approximately 2500 to 3500 years B.P.
Ash	A measure of the inorganic content of peat or soil. Usually expressed as a percentage.
Aspect	The compass direction toward which a slope faces.
Assemblage	A group of species, often of the same taxonomic class, that co-occurs in an area.
Asymptote	The point where a curve levels off and become flat, the threshold of a curve. Indicates the critical distance of a response or the zone of influence.
Atterberg limits	A geometric and decimal grade scale for classifying particles in sediments based on the unit value of 2 mm and involving a fixed ration of 10 for each successive grade. Subdivisions are geometric means of the limits of each grade.
Augite	A dark mineral of the pyroxene group, (Ca,Na) (Mg,Fe ⁺² ,Al) (Si,Al) ₂ O ₆ . It is an essential constituent of many basic igneous rocks.
Aurora	An atmospheric phenomenon consisting of bands of light caused by charged solar particles following the earth's magnetic lines of force.
Available nutrients	That portion of any element or compound in the soil that can readily be absorbed and assimilated by growing plants.
Available soil moisture	The portion of water in a soil that can be readily absorbed by plant roots; generally considered to be that water held in the soil against a pressure of up to approximately 15 kilopascals.
A-weighted decibel	A unit of sound or noise that has been filtered so the result is similar to the frequency response of the human ear.
B.P.	Before present; used to refer to the age of archaeological material or cultures relative to 1950.
Bankfull	The flow stage of a river in which the stream completely fills its channel and the elevation of the water surface coincides with the bank margins.
Barren kimberlite	Kimberlite that does not contain diamonds.
Barrens	Areas of discontinuous vegetation cover in the polar semi-desert of the Arctic. Unvegetated areas of polar desert may be caused by climatic factors (too cold and/or too dry), or edaphic factors (low soil nutrients or toxic substrate), or a combination of those.
Basalt	A dark-coloured igneous rock, commonly extrusive, composed primarily of calcic plagioclase and pyroxene; the fine-grained equivalent of gabbro.
Base saturation (BSat) percentage	The extent to which the adsorption complex of a soil is saturated with exchangeable cations other than hydrogen and aluminum.
Baseline	A surveyed or predicted condition that serves as a reference point to which later surveys are coordinated or correlated.
Basement rock	Rock generally considered to be tectonically stable.
Basin	An area drained by rivers and tributaries; separated from other basins by a height-of-land. Basin is used interchangeably with watershed in the DAR.
Bathymetry	A measurement of water depth in a water body.
BC MOE	British Columbia Ministry of Environment
Bedding planes	The surface between consecutive layers of rock.

GLOSSARY	
Bedrock	The native consolidated rock underlying the Earth's surface. The solid rock (harder than 3 on Moh's scale of hardness) underlying soils and the regolith in depths ranging from zero (where exposed to erosion) to several hundred metres.
Benthic	Pertaining to the bottom region of a water body, on or near bottom sediments or rocks.
Benthic invertebrates	Animals without backbones that live on river and lake bottoms. Benthic refers to the bottom, and these animals are also called zoobenthos.
Benthos	Organisms that live attached or associated with the bottom of a water body.
Berm(s)	A level space, shelf, or raised barrier separating two areas.
Bicarbonate	A negatively charged ion or anion (HCO_3^-) that forms carbonic acid salts that increase the buffering capacity of water.
Bioaccumulate	The continual accumulation of a substance, such as a metal or toxic chemical, in various tissues of a living organism as it ages and grows.
Bioaccumulation	A process where a substance is absorbed into the body through the skin, ingestion and/or inhalation faster than it is removed through metabolism and excretion.
Bioavailability	The fraction of the total exposure of a substance through the skin, ingestion and/or inhalation that passes into the body.
Biodiversity	The variety of plant and animal life in a particular habitat (e.g., plant community or a country). It includes all levels of organization, from genes to landscapes, and the ecological processes through which these levels are connected.
Biological oxygen demand	Amount of oxygen needed by aerobic decomposers to break down organic matter in a given volume of water at a specified temperature and time period.
Biophysical	Refers to the living and non-living components and processes of the ecosphere.
Birth rate	Is the ratio of the number of live births during one year to the total population, and is usually expressed as the number of births per year per 1,000.
Blanket	A mantle of unconsolidated material that is thick enough to mask minor irregularities on the underlying unit but still conforms to the general underlying topography.
Blow-out, blow-out pit	A small trough or bowl shaped depression from which soil material has been removed by wind.
Body burden	The total amount of a substance in the body independent of body weight.
Bog	A peat-covered area or peat-filled wetlands. The water table is at or near the surface. The surface is often raised, or level with the surrounding wetlands, and is virtually unaffected by the nutrient-rich groundwaters from the surrounding mineral soils. Hence, the ground water of the bog is generally acid and low in nutrients. The dominant peat materials are sphagnum and forest peat underlain, at times, by fen peat. The associated soils are fibrisols, mesisols and organic crysols. Bogs may be treed or treeless and they are usually covered with Sphagnum and feather mosses, and ericaceous shrubs.
Boil water advisory	A notice advising the public to boil drinking water at a rolling boil for at least one minute. This is usually issued when health officials determine that local drinking water may not be safe to drink, cook or wash with.
Boiling soil	Expulsion of saturated unfrozen soil that is under high hydrostatic pressure on the ground surface, resulting in a formation specific polygon features.
Borden block	A Canada-wide alpha-numeric archaeological site recording system that grids the country into "Borden blocks" for reference.

GLOSSARY	
Boreal	Northern, or having to do with northern regions.
Boreal forest	The northern hemisphere, circumpolar, tundra forest type consisting primarily of black spruce and white spruce with balsam fir, birch and aspen.
Boulders	Coarse fragments greater than 60 cm in diameter.
Braided	Flowing in an interconnected network of channels that divide and reunite.
Brine	Water with total dissolved solids concentration exceeding 100,000 g/m ³ .
Brittle structure	Planar features which have experienced displacement, such as faults and fractures zones.
Bryophyte	Non-vascular plants from the phylum Bryophyta. Species within this phylum include mosses, liverworts and hornworts.
Buffering capacity	The capability of a system to accept acids without the pH changing appreciably. The greater amounts of the conjugate acid-base pair, the more resistant they are to a change in pH.
Bulk density, soil	The mass of dry soil per unit bulk volume.
Calanoida	An order of copepods; small planktonic animals that are a component of zooplankton.
Calcareous	Soil containing sufficient calcium carbonate, often with magnesium carbonate, to effervesce visibly when treated with cold 0.1N hydrochloric acid.
Calcareous classes	Six classes that represent the amount of carbonates, expressed as percent calcium carbonate (CaCO ₃) equivalent, present in the soil or parent material. The classes are noncalcareous (less than 1%), weakly calcareous (1 to 5%), moderately calcareous (6 to 15%), strongly calcareous (16 to 25%), very strongly calcareous (26 to 40%), and extremely calcareous (greater than 40%). At the family level of soil taxonomy, strongly calcareous means 5 to 40% CaCO ₃ equivalent.
Calcium carbonate equivalent	The total inorganic carbon content of soil material expressed in terms of percent calcium carbonate (CaCO ₃).
Call playback survey (cps)	A survey method for detecting inconspicuous, scarce or nocturnal species known to respond to calls during the breeding season. Pre-recorded calls or call playbacks simulate the presence of an "intruder" into an already claimed territory and often elicit a response in the target species. The response of the bird allows the observer to record the presence of the species.
Calpuff	California puff model, an air quality model used to develop a three-dimensional meteorological parameters field to emulate the spatial transport, dispersion and chemical transformation of emitted substances.
Calve	Birth, caribou give birth (calve) their calves in the spring on the calving grounds
Camp	An archaeological site containing cultural material suggestive of a variety of activities and/or containing structural remains or features such as hearths.
Canadian Water Quality Guideline (CWQG) for the Protection of Aquatic Life	Guidelines established by the Canadian Council of Ministers of the Environment and used to assess the potential effects of the concentration of different water quality parameters upon aquatic life (i.e., fish, aquatic plants [macrophytes], and benthic invertebrates).
CaNP	Carbonate neutralization potential; with respect to ABA, the amount of calcium carbonate in the rock.
Capital investment	The total funds invested in a business or enterprise.
Carbon monoxide	A colourless, odourless, toxic gas at standard conditions that is a product of

GLOSSARY	
	incomplete combustion of fossil fuels.
Carnivore	An animal that preys on other animals; especially any mammal of the Order Carnivora including wolves, bears, and wolverine.
Carrying capacity	The maximum population of a given organism that a particular environment or habitat can sustain; implies continuing yield without environmental damage.
Cation	A positively charged ion.
Cation exchange	The interchange between a cation in solution and another on the surface of any surface-active material in the soil such as clay or organic matter.
Cation exchange capacity (CEC)	The total amount of exchangeable cations that a soil can adsorb. In SI units, it is expressed in centimoles (positive charge) per kilogram of soil (cmol _e /kg).
Cenozoic	The latest of the four eras into which geologic time is divided.
Channel	A long deep section of a river or other waterway through which water and sediment flow.
Chemical oxygen demand	The amount of oxygen required to decompose (oxidize) all compounds, both organic and inorganic, in water.
Chlorophyll a	The primary photosynthetic pigment contained in the phytoplankton (primary producers).
Chlorophyta	Green algae; a component of phytoplankton.
Chrysophyta	Golden-brown algae; a component of phytoplankton.
Cladocera	A group of small planktonic animals (crustaceans) also known as water fleas; a component of zooplankton.
Class 1 water treatment system	Water treatment plants are classified according to the complexity of the treatment system, the quality of the raw water source, the number of people that rely on the system for safe drinking water, and the chemicals used in the treatment process. Most Class 1 water treatment plants in the NWT use filtration and chlorination to ensure safe drinking water. The typical NWT Class 1 plant uses a groundwater source.
Class 2 water treatment system	Water treatment plants are classified according to the complexity of the treatment system, the quality of the raw water source, the number of people that rely on the system for safe drinking water, and the chemicals used in the treatment process. Class 2 systems are the most complex water treatment systems used in the NWT. The typical NWT Class 2 water treatment process may begin with screening to remove coarse suspended particles. The water then moves into a mixing chamber for flash mixing where a coagulant is added to help bind small particles together to form slightly larger particles called 'micro flocs'. The chemically treated water then flows into a flocculating chamber where another chemical, called coagulant aid, is added and the water is slowly stirred. This action will encourage and promote larger flocs to form that can be settled out more easily when the water passes through the sedimentation tank. After sedimentation, the water flows through a multi-media filter as a final polishing step to remove any flocs that may get carried over into the filter. As a final treatment step, chlorine is added to the water to disinfect it before it is stored for distribution.
Class size	The number of students a teacher is responsible for within a given school year.
Classification, soil	The systematic arrangement of soils into categories according to their inherent characteristics, or on some interpretation of those properties for various uses. Broad groupings are made on the basis of general characteristics, and subdivisions according to more detailed differences in specific properties.

GLOSSARY	
Classification, vegetation	The systematic arrangement of plant communities into categories according to their inherent characteristics. Groupings are made on the basis of dominant vegetation species, in association with commonly associated species and a commonly associated set of site and soil conditions.
Clay	(i) As a particle size term: a size fraction less than 0.002 mm equivalent diameter, or some other limit (geology or engineering). (ii) As a rock term: a natural, earthy, fine grained material that develops plasticity with a small amount of water. (iii) As a soil term: a textural class. See also texture, soil. (iv) As a soil separate: a material usually consisting largely of clay minerals but commonly also of amorphous free oxides (sesquioxides) and primary minerals.
Clay mineral	Finely crystalline hydrous aluminum silicates and hydrous magnesium silicates with a phyllosilicate structure.
Climate change scenario	A description of a possible future climate, which is based on projections of certain aspects of the Earth's future, including physical and socio-economic aspects (population levels, economic activity, and related greenhouse gas emissions).
Climate normal	A calculated average of observed climate data for a specific location, normally spanning 30 years, against which individual values may be compared to infer departures from it.
Coarse fragments	Rock or mineral particles (harder than 3 on Moh's scale of hardness) larger than 2 mm in diameter. Coarse fragments in soils are: gravels or channers (up to 8 cm in diameter or 15 cm in length), cobbles or flags (8 to 25 cm diameter or 15 to 38 cm length), and stones (greater than 25 cm diameter or 38 cm length).
Cobbly	Containing appreciable quantities of rounded or subrounded coarse rock or mineral fragments 8 to 25 cm in diameter. "Angular cobbly" is used when the fragments are less rounded.
Co-dominant	Two or more soils (or other features) of roughly equal proportion that together constitute the majority of a mapping unit.
Coefficient of variation for patch area	The ratio of standard deviation divided by the mean for a given sample; used to measure the spread of the data or the distribution around the mean for patch area.
Collapse scar	Portion of a peatland where the whole or part of a palsa or peat plateau has thawed and collapsed to the level of the surrounding peatland. Irregular topography (hence thermokarst terrain) may be present on the peatland as a whole but the collapse scars are only part of that thermokarst terrain, marked by the absence of permafrost, and by vegetation different from that on both the previously unfrozen peatlands and the remnant permafrost peat landforms.
Colloid, soil	Organic or inorganic matter having very small particle size and a correspondingly large surface area per unit of mass. Most colloidal particles are too small to be seen with the ordinary compound microscope.
Colluvium	Any loose, heterogeneous and incoherent mass of material and rock fragments deposited chiefly by gravity at the foot of or on a slope. Movement includes slow displacement such as soil creep and rapid events such as landslides, avalanches and rockfalls.
Colonial	Individuals of the same species clustered together to form a group.
Community	Group of co-existing organisms in an ecosystem.
Competition	Interactions among organisms that use the same limiting resources (resource competition) or that harm one another in the process of seeking a resource (interference or intraspecific competition).

GLOSSARY	
Composite sample	A sample taken by combining several fractions of water from different depths within the water column of a lake into a common vessel that is used to collect the water sample destined for the laboratory. A composite sample can also be obtained as a combination of samples taken from different parts of a water body laterally.
Conductivity	A measure of the resistance of a solution to electrical flow; an indirect measure of the salinity of the water.
Conifers	Trees which produce their seeds in cones and have needles; evergreens such as pines, firs, spruces, or larches.
Consistence	(i) The resistance of a material to deformation or rupture. (ii) The degree of cohesion or adhesion of the soil mass.
Consolidated	Firm and coherent materials.
Consumer price index	An index of the changes in the cost of goods and services to a typical consumer, based on the costs of the same goods and services at a base period. Is a measure of the impact of inflation on household expenditure.
Contact zone	Zone where plutonic igneous rock intrude into the surrounding rock. Contact refers to the effect on rocks of conductive or convective heat transfer.
Continuous permafrost	Permafrost occurring everywhere beneath the exposed land surface throughout a geographic region with the exception of widely scattered sites, such as newly deposited unconsolidated sediments, where the climate has just begun to impose its influence on the thermal regime of the ground, causing the development of continuous permafrost.
Continuous permafrost zone	The major subdivision of a permafrost region in which permafrost occurs everywhere beneath the exposed land surface with the exception of widely scattered sites.
Control section (water)	The cross-section in a channel that governs water levels in an upstream water body; minor changes to the channel geometry upstream or downstream of this section will not affect the upstream water level regime.
Control section (soil)	The vertical section of soil upon which the taxonomic classification is based, generally 1 m for mineral soils and 1.6 m for organic soils.
Copepoda	An order of planktonic crustacean; a component of zooplankton.
Core need income threshold	Is an income limit for each community that represents the amount of income a household must have to be able to afford the cost of owning and operating a home or renting in the private market without government assistance.
Corporate income tax	Income tax paid by corporations (rate is currently 11.5% in the NWT).
Correlation coefficient	A number between -1 and 1 that describes the degree to which two variables are linearly related. A positive value indicates that the two variables rise and fall with each other; a negative value indicates that a rise in one variable corresponds to a fall in the other.
Cost of living	The average cost of food, clothing, and other necessary or usual goods and services paid by a person, family, etc., or considered as a standard by the members of a group.
Country foods	traditional foods obtained through hunting, fishing, or other traditional methods (including caribou, muskox, fish, and birds).
Country rock	The surrounding rock.
Covariate	An independent variable, or predictor variable, in a statistical model. Also, a secondary variable that can affect the relationship between the dependent

GLOSSARY	
	variable and independent variables of primary interest in a statistical model.
Cratering	When caribou dig down through snow and ice to access lichen.
Cretaceous	Period of geologic time beginning 135 million years before present and ending 65 million years before present.
Critical load	A quantitative estimate of an exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge.
Cryogenesis	The combination of thermophysical, physico-chemical and physico-mechanical processes occurring in freezing, frozen and thawing earth materials. Specific processes of cryogenesis include water migration during freezing and thawing of the ground, frost heave, heat and mass (moisture) exchange, regulation and gelifluction.
Cryosolic	An order of soils in the Canadian taxonomic system. Cryosolic soils are mineral or organic soils that have perennially frozen material within 1 m of the surface in some part of the soil body, or pedon. The mean annual soil temperature is less than 0°C (32°F). Their maximum development occurs in organic and poorly drained, fine textured materials. The active layer of these soils is frequently saturated with water, especially near the frozen layers, and colors associated with gleying are therefore common in mineral soils, even those that occur on well drained portions of the landscape. They may or may not be markedly affected by cryoturbation. The order has three great groups: Turbic Cryosol, Static Cryosol, and Organo Cryosol (q.v.).
Cryosphere	Encompasses all portions of the Earth's surface where water is present in solid state, including sea ice, lake ice, river ice, snow cover, glaciers, ice caps and ice sheets, and frozen ground.
Cryotic ground	Soil or rock at temperatures of 0°C or lower. Cryotic and noncryotic refer solely to the temperature of the material described, independent of its water or ice content.
Cryoturbation	Frost action that causes churning, heaving, and considerable structural modification of the soil and subsoil.
Current drinker	A person who indicated that they had at least one drink of alcohol in 12 months prior to the NWT Drug and Addiction Survey.
C-weighted decibel	A unit of sound or noise that has minimal filtering. Usually used to determine low-frequency content of noise.
Cyanobacteria	Blue-green algae; a component of phytoplankton.
Cyclopoida	An order of copepods; small planktonic animals.
D ₉₀	The diameter of the substrate particle (e.g., boulder) that is greater than 90% of all of the substrates in a stream.
Daily average	The arithmetic mean based on a data set of 24 1-hour averages for each day. Daily averages are only calculated for days with eighteen or more valid hours of data in the day.
Dam	A structure built as a barrier to the flow of a stream or river. Also refers to the act of impeding the flow of a watercourse.
Death rate	A mortality index that is usually expressed as the number of deaths per year per 1,000.
Debitage or detritus	The unworked flakes discarded during the manufacture of stone tools (see flake and lithic).

GLOSSARY	
Debris flow	A sudden and destructive variety of landslide, in which loose material on a slope, with more than 50 percent of particles larger than sand size, is mobilized by saturation and flows down a channel or canyon.
Decibel	A unit that measures the volume of sound or noise expressed on a logarithmic scale.
Deciduous	Deciduous means temporary or tending to fall off (deriving from the Latin word <i>decidere</i> , to fall off) and is typically used in reference to trees or shrubs that lose their leaves seasonally.
Decile	In natural resources mapping, the proportion (in tenths) of a polygon covered by a particular feature (soil type, terrain, ecosystem).
Decisiemen	One tenth of a siemen; a unit of electrical conductance; the reciprocal of ohm. Decisiemens are the most common units used to indicate salinity as measured by electrical conductivity.
Deflation hollow	A trough or depression in the land surface created by wind erosion.
Deformation	Term for the processes of folding, faulting, shearing, compression or extension of rocks as a result of various earth forces.
Deglaciation	The uncovering of an area from beneath glacier ice as a result of melting.
Delineation	See Polygon.
Deltaic deposit	Materials deposited in a delta, characterized by well developed cross bedding.
Demographics	Study of populations with emphasis on quantitative data.
Density	The number of individuals per unit area.
Deposition, deposit	The accumulation of material left in a new position by a natural transporting agent such as water, wind, ice or gravity; or by the activity of man.
Depressional	Describing an area with elevation lower than that of the surrounding area; any hollow, basin, or flat, low-lying area in the landscape.
Depth of thaw	The minimum distance between the ground surface and frozen ground at any time during the thawing season in an area subject to seasonal freezing and thawing.
Diabase	A dark coloured, fine to medium-grained igneous intrusive rock.
Diatom	A group of algae that are encased within a frustule made of silica; a component of phytoplankton.
Dimictic	A type of lake where the water column mixes completely (overturns) twice a year (once in spring and once in fall).
Discharge	The volumetric rate of flow of water in a watercourse at a specified point, expressed in units of cubic metres per second or equivalent.
Discontinuous permafrost	Permafrost occurring in some areas beneath the exposed land surface throughout a geographic region among areas that are free of permafrost. Discontinuous permafrost occurs between the continuous permafrost zone and the southern latitudinal limit of permafrost in lowlands.
Dissolved organic carbon	All organic carbon that results from the decomposition of organic matter (such as sugars and acids) that leaches from soils and becomes dissolved within the water. High DOC concentrations change the water colour from clear to “tea-coloured”.
Dissolved oxygen	The amount of free oxygen dissolved in water, usually expressed in milligrams per litre (mg/L), parts per million (ppm), or percent of saturation (%). Adequate concentrations of dissolved oxygen are necessary for fish and other aquatic

GLOSSARY	
	organisms.
Distribution	The pattern of dispersion of an entity within its range.
Disturbed land	Area where vegetation, topsoil, or overburden is removed, or where topsoil, spoil, and processed waste is placed (as in mining). Also called disturbed area.
Diurnal	Daily; occurring or active during the daytime rather than night.
Diversity	A numerical index that incorporates evenness and richness; the diversity index measures the proportional distribution of organisms in the community.
Domestic violence	Acts of violence or abuse against a person living in one's household, especially a member of one's immediate family.
Dominant	In natural resources mapping, the feature (soil type, terrain, or other feature) that constitutes the majority of a mapping unit (generally 40% or more, and usually 50% or more).
Drainage	The removal of excess surface water or groundwater from land by natural runoff and percolation, or by means of surface or subsurface drains.
Drainage area	Total area of a watershed, including land and water surfaces.
Drainage basin	The area drained by a river or stream; see also watershed.
Drawdown	A lowering of the water level in a reservoir or other body of water.
Drawdown zone	In reference to a lake outlet, the lake area upstream of a flowing lake outlet where water surface elevations drop as potential energy (elevation) is converted to kinetic energy (velocity).
Drift, glacial	All material moved by glaciers and by the action of meltwater streams and associated lakes.
Drumlins	A long narrow hill, made up of till, which points in the direction of the glacier movement.
Duff	The layer of partially and fully decomposed organic materials lying below the litter and immediately above the mineral soil.
Dune	A mound or ridge of sand piled up by the wind.
Duplicate field sample	A second sample collected at the same time and from the same location, repeating the same collection procedure as the original sample. The sample is used to detect variability at a site and verify the field-sampling method.
Duplicate laboratory sample	A water sample that is submitted to the laboratory is split into two samples by the Lab., each tested separately. These samples are used to assess the reproducibility of the laboratory results (i.e., laboratory method and analyses).
Duration	Defined as the length of time that an effect will occur.
Dyke	A tabular body of igneous rock that cuts across the bedding or foliation of the rock it intrudes.
Earnings	Include payments from paid employment and self-employment.
Earth hummock	A hummock having a core of silty and clayey mineral soil which may show evidence of cryoturbation. Earth hummocks are a type of nonsorted circle (see Patterned ground) commonly found in the zone of continuous permafrost. They develop in materials of a high silt and clay content and/or of high ice content.
Ecodistrict	A broad subdivision of the landscape based on differences in landscape pattern, topography and dominant soils.

GLOSSARY	
Ecological land classification	An ecological mapping process that involves the integration of site, soil, and vegetation information.
Ecology	Ecology is usually considered a branch of biology, the general science that studies living organisms.
Ecoregion	Refers to a relatively large area of land or water that contains an area characterized by distinctive regional climate as expressed by a geographically distinct assemblage of natural communities. Also characterized by relatively homogeneous subregions within an ecozone.
Ecosystem	An integrated and stable association of living and non-living resources functioning within a defined physical location. A community of organisms and its environment functioning as an ecological unit.
Ecozone	A broad level biogeographical division as part of an ecological land classification (ELC) used across Canada that describes a given set of environmental and ecological conditions that function as a unique system as they are often separated from other ecozones by geographic or climatic barriers.
Edaphic	(i) Of or pertaining to the soil. (ii) Resulting from or influenced by factors inherent in the soil or other substrate, rather than by climatic factors.
Effective width	To calculate survey area coverage, an estimate of the area covered in unbounded aerial transects is required. Effective width is the area perceived to be covered in survey transects (i.e., 1 km).
Effects	A noticeable change in the receptor beyond normal variability due to a chemical of concern or other stressor.
Effluent	Outflowing of water or other liquids from a man-made structure.
Ekman dredge	A sampling apparatus used to collect a discrete sample of sediment.
ELC	Ecological Land Classification; an ecological mapping process that involves the integration of site, soil, and vegetation information.
Electrical conductivity	The ability of water to conduct an electric current per unit area divided by the voltage drop per unit length. Commonly used as an index of salinity.
Elliptical blow	Small kimberlitic intrusion. A thickening (usually more than 10 m thick) of a dyke (usually about 1 m thick).
Eluvial horizon	A soil horizon that has been formed by the process of eluviation.
Eluviation	The transportation of soil material in suspension or in solution within the soil by the downward or lateral movement of water.
Embayment	A bay or protected area in a lake.
Emission	The act of releasing or discharging air contaminants into the ambient air from any source.
Emission factor	An estimate or statistical average of the rate at which a contaminant is released to the atmosphere as a result of some activity, such as combustion or industrial production, divided by the level of that activity. The emission factor, therefore, relates the average quantity of each contaminant emitted according to an appropriate base quantity. Emission factors are usually expressed as a weight of contaminant divided by a unit weight, volume, distance or duration of associated activity that emits the pollutant (e.g., kg of SO ₂ emitted per kilometre travelled).
Emission inventory	An emission inventory is a comprehensive account of air contaminant emissions and associated data from sources within the inventory area over a specified period that can be used to determine the effect of emission on ambient air quality.

GLOSSARY	
Employee turnover rate	The ratio of the number of workers that had to be replaced in a given time period to the average number of workers.
Employment income	Refers to total income received by persons 15 years of age and over for any employment.
Employment rate	The percentage of persons 15 years of age and over who were employed during the week prior to the survey.
Endogenous reserve	Energy reserves stored within the body, generally as lipids (fat) or protein (muscle).
Energetics	Refers to the metabolic rate and energy consumption of a given animal. Energetics are often measured based on behavioural observations of animal activity and proportion of time spent doing different activities (e.g., resting, walking, running, feeding) and are presented as an Energy Budget, typically a pie chart.
Entrainment	The process by which fish are swept into and through spillways and turbines.
Enumeration	The act of counting individuals.
Environmental assessment (EA)	An assessment of the environmental effects of a project that is conducted in accordance with the Canadian Environmental Assessment Act and its regulations.
Environmental impact statement	A report that documents the information required to evaluate the environmental impact of a project.
Eolian	Pertaining to the action or effect of the wind. Eolian sedimentation includes well sorted materials and results from the transport of grains by the flow of moving air.
Ephemeral	Lasting for a short time or part of a complete cycle. In reference to water, typically describes a stream that flows for only part of the open-water period.
Ericaceous	Belonging or relating to the heath family, a group of evergreen bushes and small trees that includes the heath, heather, blueberry, rhododendron, azalea, and arbutus.
Erosion	(i) The wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep. (ii) Detachment and movement of soil or rock by water, wind, ice, or gravity.
Erratic	A rock fragment, different from the local bedrock, carried by glacier ice or floating ice and deposited when the ice melted at some distance from the outcrop from which the fragment was derived.
Escarpment	A steep face or ridge of high land.
Eskers	A sinuous ridge of constructional form consisting of stratified accumulations of glacial sand and gravel deposited by a subglacial stream running between ice walls or in an ice tunnel, left behind after melting of the ice of a retreating glacier.
Euglenophyta	Euglena; a component of phytoplankton.
Eutrophic	Term referring to peatlands or wetlands that are relatively nutrient-rich; also refers to soils and waters with high nutrient content and high biological activity.
Eutrophication	The process whereby a body of water becomes rich in dissolved nutrients through natural or man-made processes. This often results in a deficiency of dissolved oxygen, producing an environment that favours plant over animal life.
Evapotranspiration	The conversion of soil moisture from a liquid to a gas, by evaporation of water directly from the soil surface and by transpiration from vegetation.
Evenness	A measure of how evenly the total invertebrate abundance is distributed among the different types of organisms present at the site.

GLOSSARY	
Exchangeable cation	A cation that is held by the adsorption complex of the soil and is easily exchanged with other cations of neutral salt solutions.
Exposure	An area of a rock formation that is visible at the land surface.
Exposure ratio	Health risks are estimated by comparing the predicted exposure(s) to the acceptable toxicity reference values. For threshold-acting contaminants, the human and non-human risk estimate is expressed as an exposure ratio (ER).
Fan	Landform with a perceptible gradient from the apex to the toe. Deposited by a stream when it emerges from an upslope position onto a lowland with a marked decrease in gradient.
Fatal collision	A motor vehicle collision resulting in death within 30 days to one or more involved persons. Death must be the result of injuries incurred from the collision. This excludes death from natural causes such as heart attacks.
Feather moss	A collective term for three primary moss species: Schreber's moss (<i>Pleurozium schreberi</i>), stair-step moss (<i>Hylocomium splendens</i>), and knight's plume moss (<i>Ptilium crista-castrensis</i>).
Features	Non-portable artifact of human construction; examples include hearths, tent rings, and caches.
Fecundity	Fecundity rates were a function of the annual natality rate (i.e., birth rate) multiplied by adult survival rate.
Feldspar	A group of abundant rock-forming minerals of the general formula, $MAI(Al,Si)_3O_8$, where M can be K, Na, Ca, Ba, Rb, Sr, or Fe. Feldspars are the most widespread of any mineral group and constitute 60% of the earth's crust; they occur in all types of rock.
Fen	A wetland, covered or filled with fen peat, having a high water table which is usually at or above the surface.
Fen peat	Peat material constituting fens, composed of the partially decayed remains of sedges, brown mosses, and small amounts of leaves, stems and trunks of trees and shrubs such as black spruce and tamarack.
Fertility, soil	The status of a soil with respect to the amount and availability to plants of elements necessary for plant growth.
Fetal alcohol spectrum disorder	Fetal Alcohol Spectrum Disorder describes a continuum of permanent birth defects resulting from maternal consumption of alcohol during pregnancy.
Fibre, rubbed or unrubbed	The organic (peat) material retained on a 100-mesh sieve (0.15 mm) either with or without rubbing, except for wood fragments that cannot be crushed in the hand and are larger than 2 mm in the smallest dimension.
Fibric	Organic materials containing large amounts of weakly decomposed fibers whose botanical origins are readily identifiable; fibric material has 40% or more of rubbed fiber by volume (or weight of rubbed fiber retained on a 100 mesh sieve) and is classified in the von Post scale of decomposition as class 1 to class 4. See also Horizon, soil.
Field blank	A solution of de-ionized water provided by the laboratory that is used to detect sample contamination during the collection, shipping, and analysis of samples.
Field capacity	The percentage of water remaining in the soil two or three days after the soil has been saturated, and free drainage has practically ceased.
Filamentous	Pertaining to a long chain of cells.
Fines	Silt and clay particles.

GLOSSARY	
Flake	Fragment of rock discarded during core reduction or in the manufacture of stone tools (see debitage and lithic).
Flank	Side slopes of an upland.
Floodplain	The land bordering a stream, comprising sediments from overflow of the stream and subject to inundation when the stream is at flood stage.
Flow	The rate at which water passes a given point in a stream or river, usually expressed in cubic metres per second.
Flow rate	The time required for a volume of groundwater to move between points. Typically groundwater moves very slowly - sometimes as little as centimetres per year.
Flutings	Landform produced subglacially, consisting of grooves and ridges exhibiting a linear orientation parallel to the direction of ice sheet movement.
Fluvial	Relating to a stream or river.
Fluvial (alluvial) material	All sediments, past and present, deposited by flowing water, including glaciofluvial deposits.
Fluvial/eolian	Originally deposited from moving water, subsequently transported by wind.
Focal individual sampling	A behavioural sampling technique where a single animal (the focal individual) is observed closely and all behaviours recorded for a standardized amount of time.
Food bank	An agency, group, or center that collects food and distributes it to the needy.
Food price index	An index of the changes in the cost of food to a typical consumer, based on the costs of the same food in another place.
Forb	A herbaceous plant which is not a grass, sedge or rush.
Forebay	Refers to the standing body of water upstream of a dam that provides the hydraulic head for flow through a power generating station.
Forest peat	Peat materials derived mainly from trees such as black spruce, from ericaceous shrubs, and from feathermosses.
Forfeiture	The loss of an asset, or rights to an asset, as a result of defaulting on contractual obligations or conditions.
Fork length	Measurement of fish length from the tip of the snout to the end of the middle fin ray.
Former drinker	A person who indicated that they have drunk alcohol, but have not consumed any alcohol during the 12-month period prior to the survey according to NWT Drug and Addiction Survey.
Francis turbine	A radial inflow reaction turbine.
Freeze-thaw cycle	Freezing of a material followed by thawing.
Freezing index	A sum of hourly/daily/monthly negative air temperatures for the annual term.
Frequency	Refers to how often an effect will occur.
Frequency (sound)	The number of cycles per second of a passing sound wave at a point. The human ear does not respond to all frequencies in the same way. Mid-range frequencies are most readily detected by the human ear, while low and high frequencies are harder to hear.
Freshet	The period of increased stream flow in spring caused by the melting snow pack.
Friable	Soil material that is easily crushed under gentle to moderate pressure on its mass.

GLOSSARY	
Friable permafrost	Permafrost in which the soil particles are not held together by ice.
Friction modelling	A type of optimal path analysis that deals with finding the least-cost route between two locations, based on the measurements of resistance or friction related to physical or environmental conditions. It is a type of GIS model often used when the application requires finding a path across a terrain that may not have any predefined paths. Also known as least cost path analysis.
Frost action	The process of alternate freezing and thawing of moisture in soil, rock and other materials, and the resulting effects on materials and on structures placed on, or in, the ground.
Frost blister	A seasonal frost mound produced through doming of seasonally frozen ground by a subsurface accumulation of water under elevated hydraulic potential during progressive freezing of the active layer.
Frost boil	A small mound of soil material, presumed to have been formed by frost action. A type of nonsorted circle; they are commonly found in fine-grained sediments underlain by permafrost, but also occur in non-permafrost areas.
Frost bulb	A more or less symmetrical zone of frozen ground formed around a buried chilled pipeline or beneath or around a structure maintained at temperatures below 0°C.
Frost cracking	A process of breaking frozen soil due to thermal contraction.
Frost creep	The net downslope displacement that occurs when a soil, during a freeze-thaw cycle, expands normal to the ground surface and settles in a nearly vertical direction.
Frost-free period	The period or season of the year between the last frost of spring and first autumn frost.
Frost heave	The upward or outward movement of the ground surface (or objects on, or in, the ground) caused by the formation of ice in the soil.
Frost jacking	Cumulative upward displacement of objects embedded in the ground, caused by frost action.
Frost mound	Any mound-shaped landform produced by ground freezing combined with accumulation of ground ice due to groundwater movement or the migration of soil moisture. Various types of frost mounds, (e.g., frost blisters, icing blisters, palsas and pingos) can be distinguished on the basis of their structure and duration, and the character of the ice contained in them.
Frost shattering	The mechanical disintegration of rock by the pressure of the freezing of water in pores and along grain boundaries.
Frost sorting	The differential movement of soil particles of different size ranges as a result of frost action. Frost sorting often accompanies cryoturbation.
Fugitive dust	Particulate matter suspended in the air by wind action and human activities.
Gabbro	A group of dark-coloured, basic intrusive igneous rocks composed principally of labradorite or bytownite and augite, with or without olivine and orthopyroxene; also, any member of that group. It is the approximate intrusive equivalent of basalt. Apatite and magnetite or ilmenite are common accessory minerals.
Gap analysis	In the context of this report, an evaluation of data to determine whether there is missing information, whether spatial, temporal or against some other standard.
General circulation model (gcm)	A class of computer-driven models used to research and understand the climate system, to forecast weather, and to project climate change.
Genesis, soil	The mode of origin of soil, especially the processes or soil forming factors responsible for development of the soil profile from unconsolidated parent

GLOSSARY	
	material.
Genetic material	Parent material of soil classified according to its origin or genesis. Classes include anthropogenic, colluvial, eolian, fluvial (glaciofluvial), lacustrine (glaciolacustrine), morainal, undifferentiated, bog, fen, swamp, bedrock and ice.
Geographic information system	A computer-based tool for analyzing, displaying and manipulating digital spatial data.
Geometric mean	The Nth root of the product of all values in a data set of N values.
Geotechnical	Pertaining to earth or rock structures and their properties.
Geothermal gradient	An increase of soil temperature with depth due to the heat flux of the Earth core. An average geothermal gradient is approximately 2 °C per 100 m.
Glacial	(i) Of or relating to the presence and activities of ice or glaciers, such as glacial erosion. (ii) Pertaining to distinctive features and materials produced by or derived from glaciers and ice sheets, such as glacial lakes. (iii) Pertaining to an ice age or region of glaciation.
Glacial drift	All material in transport by glacier ice and all deposits and landforms produced by such streams.
Glaciofluvial	Sediments or landforms produced by melt waters originating from glaciers or ice sheets. Glaciofluvial deposits commonly contain rounded cobbles arranged in bedded layers.
Glaciolacustrine	Fine grained sediment deposited in proglacial lake environments. It is composed of suspended material brought by meltwater streams flowing into lakes bordering glaciers.
Gley, gleying	A chemical reduction process that takes place in soils that are saturated with water for long periods of time. The horizon of most intense reduction is characterized by a grey, commonly mottled appearance, which on drying shows numerous rusty brown iron stains or streaks.
Gleysolic soil	Soil developed under wet conditions resulting in reduction of iron (i.e., rust) and other elements and in grey colours and mottles.
Gneiss	A coarse crystalline metamorphic rock in which there are bands of light and dark minerals of widely varying origin and mineralogy.
Grab sediment sample	A single sediment sample collected using an Ekman dredge or other similar sampling apparatus.
Grab water sample	A single discrete water sample that is collected from a water body and sent to the laboratory for analysis.
Gradient	The slope of a stream channel or lake shoreline.
Graminoid	Plants with a grass like growth form including rushes, grasses and sedges.
Granitic	Pertaining to or composed of granite.
Gravel	(i) As a deposit term: glaciofluvial or fluvial materials with 60% or more coarse fragments, usually subrounded to rounded and of variable size. (ii) As a particle size term: a size fraction between 2 and 75 mm diameter with rounded, subrounded, angular, or irregular shapes.
Gravelly	Containing appreciable amounts of rounded or subrounded rock or mineral fragments 2 mm to 8 cm in diameter. 'Angular gravelly' is used when the fragments are less rounded.

GLOSSARY	
Great group	A category in the Canadian system of soil classification. A subdivision of a soil order, it is a taxonomic grouping of soils having certain morphological features in common and a similar pedogenic environment.
Gross domestic product	The total market value of all the goods and services produced within the borders of a nation during a specified period.
Ground ice	A general term referring to all types of ice contained in freezing and frozen ground. Ground ice occurs in pores, cavities, voids or other openings in soil or rock and includes massive ice. It may occur as lenses, wedges, veins, sheets, seams, irregular masses, or as individual crystals or coatings on mineral or organic particles. Perennial ground ice can only occur within permafrost bodies.
Ground moraine	Till material largely derived from the contact between rock materials and the overlying ice sheet.
Groundwater	Water within interconnected pore spaces of the subsurface within the saturated zone below the water table.
Groundwater discharge	Release of groundwater from a subsurface zone of saturation.
Groundwater flow	The movement of water through interconnected voids in the phreatic zone.
Growing season	Period with soil temperatures over 5°C at a depth of 50 cm.
Growth rate	Absolute or relative growth increase, expressed in units of time.
Guideline for Canadian Drinking Water Quality	Health Canada guidelines used to assess the suitability of water for human consumption.
Gully	A channel caused by erosion and the concentrated but intermittent flow of water during or immediately after heavy rains or snow melt.
Guys	Infrastructure designed to add stability to tall, narrow structures. Guy wires for example refer to a tensioned cable in which one end of the cable is attached to the structure, and the other is anchored to the ground at a set distance from the structure's base.
Habitat	The physical space within which an organism lives, and the abiotic and biotic entities (e.g., resources) it uses and selects in that space.
Habitat available	The accessibility and use of physical and biological components in a habitat.
Habitat fragmentation	A process by which habitats are increasingly subdivided into smaller units, resulting in their increased restriction as well as an overall loss of habitat area and biodiversity.
Habitat preference	Used to describe the relative use of different locations (habitats) by an individual or species.
Habitat selection	A hierarchical process involving a series of innate and learned behavioural decisions made by an animal about what habitat it would use at different scales of the environment.
Habitat use	The way an animal uses (or consumes, in a generic sense) a collection of physical and biological entities in a habitat.
Hardness	A characteristic of water caused by the presence of positively charged ions (cations) such as calcium, magnesium, iron, and manganese. This parameter is measured in mg/L of calcium carbonate.
Head	The difference in elevation between water levels upstream and downstream of a dam.
Headwater	The source of water at the top of a watershed, typically a lake or marsh.

GLOSSARY	
Heat capacity	The amount of heat required to raise soil temperature one degree.
Heath tundra	A closed mat plant community that grows on moderate to well-drained soils, covering most of the upland areas. Plants generally belong to the heath family, the Ericaceae. The vegetation layer forms a mat of low shrubs dominated by dwarf birch and Labrador tea.
HEC RAS	A computer program that models the hydraulics of water flow through natural rivers and other channels.
HEC-Res and HEC-ResSim	A program designed to be used to model reservoir operations at one or more reservoirs whose operations are defined by a variety of operational goals and constraints (definition courtesy of US Army Corps of Engineers).
Herb	Any flowering plant except those developing persistent woody bases and stems.
Heterogeneity	Consisting of parts that are unlike each other. For example, the variety and abundance of ecological units (e.g., ecosite phases and wetlands types) comprising a landscape mosaic.
High flow	The periodic increase in a river's water level as a result of increased precipitation or snowmelt.
High-centre polygon	An ice-wedge polygon in which melting of the surrounding ice wedges has left the central area in a relatively elevated position.
Historic	Refers to the period of time for which there are written records; also referred to as post-contact.
HIV	HIV is an abbreviation of the term Human Immunodeficiency Virus; HIV is the virus that causes AIDS. It is also called "the AIDS virus".
Holocene	The geologic time period since deglaciation (about 10,000 years).
Home range	The area traversed by an animal during its activities during a specific period of time.
Homogeneity	The quality of being similar or comparable in kind or nature.
Homogenous	Similar in size, shape, structure, or other feature.
Horizon, soil	The various layers found in a soil profile.
Horizontal	A type of surface expression of peatland terrain consisting of a flat peat surface not broken by any marked elevations or depressions.
Horizontal control	Measurements to define location in the x, y (or north, south) plane.
Hornblende	Dark green to black crystals that are minerals of the amphibole group; common in various types of metamorphic and igneous rocks. The general formula is $\text{Ca}_2(\text{Mg}, \text{Fe}^{+2})_4\text{Al}(\text{Si}_7\text{Al})\text{O}_{22}(\text{OH}, \text{F})_2$.
Household	Refers to an occupied private dwelling.
Housing cost index	An index of the changes in the cost of housing to a typical consumer, based on the costs of the same housing in another place.
Humic	Organic material, such as peat, that is at an advanced stage of decomposition. It has the lowest amount of fibre, the highest bulk density, and the lowest saturated water-holding capacity of the organic materials. It is physically and chemically stable over time, unless it is drained. The rubbed fibre content is less than 10% by volume and the material usually is classified in the von Post scale of decomposition as class 7 or higher. See also Horizon, soil.
Humification	The processes by which organic matter decomposes to form humus.

GLOSSARY	
Hummocky	A very complex sequence of slopes extending from somewhat rounded depression or kettles or various sizes to irregular to conical knolls or knobs. There is a general lack of concordance between knolls and depressions.
Humus	(i) The fraction of the soil organic matter that remains after most of the added plant and animal residues have decomposed. It is usually dark coloured. (ii) Humus is also used in a broader sense to designate the humus forms referred to as forest humus. (iii) All the dead organic material on and in the soil that undergoes continuous breakdown, change and synthesis.
Hydraulic conductivity	The ability of a porous medium to conduct a fluid (e.g., water). It is the combined property of a porous medium and the fluid moving through it in saturated flow, which determines the relationship, called Darcy's Law, between the specific discharge and the head gradient causing it.
Hydraulic gradient	The difference in piezometric level or hydraulic head between two points over a change in distance in the direction, which yields the greatest change in hydraulic head.
Hydraulic head	The level to which water will rise if a standpipe is installed.
Hydrocarbon	A chemical compound that consists only of the elements carbon (C) and hydrogen (H). Hydrocarbons are combustible and are the main components of fossil fuels, which include petroleum, coal, and natural gas.
Hydrogeology	The scientific study of occurrence and flow of groundwater and its effects on earth materials.
Hydrograph	A hydrograph is a time record of the discharge of a stream, river or watershed outlet.
Hydrological processes	Natural actions that deal with the movement of water within the earth-atmospheric system.
Hydrology	The study of flowing water and effects of flowing water on the earth's surface, in the soil and underlying rocks, and in the atmosphere.
Hydroperiod	The period of time during which a wetland is covered by water.
Hydrophyte	A plant that grows in water, or in permanently wet or saturated soils.
Hydrophytic plant species	Any plant adapted for growing on permanently saturated soils, deficient in oxygen.
Hydrostatic pressure	Pressure exerted in a column of water.
Hygic	Soil moisture conditions where water is removed slowly enough to keep the soil wet for most of the growing season. Permanent seepage and mottling are present and possibly weak gleying.
Hypolimnion	The lowest layer in a lake below the thermocline which typically has lower temperatures and lower dissolved oxygen concentrations than water nearer the surface.
Hypoxic	Low in oxygen.
IC ₅₀	The concentration of a substance required to inhibit 50% of the growth or survival of an organism.
Ice contact stratified drift	Partially sorted material deposited in contact with melting glacier ice but with concurrent and subsequent reworking, locally, by flowing and ponded glacial meltwater. The reworked material is usually coarse textured and resembles glaciofluvial sediments. In some cases it is fine to medium textured and resembles

GLOSSARY	
	glaciolacustrine deposits.
Ice contact terrain	Landform or landforms, often moraine-like in appearance, consisting of a complex mixture of materials including the basal material, usually till or glaciolacustrine sediment, plus layers and pockets of ice contact stratified drift. The individual materials are not usually mappable except at very large scales (e.g., larger than 1:5,000 or 1:2,000).
Ice lens	Small ice bodies, usually several centimetres thick, in frozen soils.
Ice vein	An ice-filled crack or fissure in the ground.
Ice wedges	A large, usually wedge-shaped mass of foliated ground ice produced in permafrost, occurring as a vertical or inclined sheet, dyke or vein, tapering downward, and generally measuring from a few millimetres to several meters wide and sometimes reaching 30 m depth. It originates by the freezing of water in narrow cracks or fissures produced by thermal contraction of the permafrost.
Ice-wedge polygon	A polygon outlined by ice wedges underlying its boundaries. Ice-wedge polygons occur in both mineral terrain and peatland, commonly in poorly drained permafrost areas.
Immature soil	A soil with indistinct or only slightly developed horizons.
Immigrant	A person who leaves one country to settle permanently in another.
Impeded drainage	A condition which hinders the movement of water through soils under the influence of gravity.
Impeding horizon	A horizon that hinders the movement of water by the influence of gravity through soils.
<i>In situ</i>	In place.
In situ Measurement	The on-site measurement of physical water quality parameters in a water body. Parameters such as temperature, DO, conductivity, and pH are collected using a handheld meter.
Incidental wildlife observation	Detection of wildlife or sign by chance or without intention during or outside a designated survey area or period.
Inclined	A sloping, unidirectional surface of at least 300 m length and not broken by marked irregularities. Slopes can be 2 to 70%.
Inclusion	In natural resources mapping, a soil, terrain or other feature that constitutes up to 15 or 20% of a unit. Some map units contain several inclusions that together add up to a substantial percentage.
Income	The amount of money or its equivalent received during a period of time in exchange for labour or services, from the sale of goods or property, or as profit from financial investments.
Income assistance	Financial aid provided to individuals who do not possess adequate funds with which to pay for basic food, shelter, utilities and clothing.
Indicator plants	Plants characteristic of specific soil or site conditions.
Indurated	Rendered hard or cemented.
Infiltration	The downward entry of water into the soil.
Inflation	A general and progressive increase in prices.
Inflation rate	The rate of change of prices (as indicated by a price index) calculated on a monthly or annual basis.

GLOSSARY	
Inflow	Water flowing into a lake.
Injection	The forcing of sedimentary material into a crack or fissure in a pre-existing deposit or rock.
In-migration	To move into a different region of the same country or territory.
Intake	The entrance to a conduit through a dam or water facility.
Intermediate rock	An igneous rock that is transitional between basic and silicic, generally having a silica content of 54 to 65 percent.
Inter-provincial migration	Those people who moved inter-provincially or internationally refer to those people who moved into or out of the NWT from elsewhere in Canada or from abroad.
Interstitial	Pertaining to the area or space between rocks in a stream or lake.
Intra-territorial migration	Referring to those people who moved to a different community from within a designated region or area.
Intrusive	Pertaining to the process of emplacement of magma in pre-existing rock.
Inukshuk	A stone landmark, or rocks piled up to look like a person from a distance, used as a milestone or directional marker by the Inuit of the Canadian Arctic.
Inundate	To cover with water, especially floodwaters during spring freshet.
Inversely stratified	The phenomenon where water temperatures in a lake in winter are warmer at the bottom than nearer the surface of the ice.
Invertebrate drift	Animals without backbones that are found in the water column of flowing waters.
Invertebrates	A term describing any animal without a spinal column. Benthic invertebrates are those invertebrates that inhabit the bottom region of a water body, on or near bottom sediments or rocks.
Isolated find	An archaeological site type consisting of a single artifact, whether an unworked flake, stone tool, or other specimen.
Isolines	Lines joining points that have the same value.
Isotherm	A line of equivalent temperature (not just in water).
Isothermal	Indicating equal or constant temperatures.
Joint set	A group of more or less parallel joints.
Junior high	School classes for students in grades 7, 8 and 9.
Kames	Steep-sided mounds of stratified material deposited against an ice-front.
Kaplan turbine	An axial flow reaction turbine with adjustable runner blades used mainly under low head conditions.
Kettle	A steep-sided bowl or basin-shaped hole or depression in glacial drift deposits, especially outwash or kame, and believed to have formed by the melting of a large, detached block of stagnant ice (left behind by a retreating glacier) that had been wholly or partly buried in the glacial drift. Kettles commonly lack surface drainage and some may contain a lake or swamp.
Key Line of Inquiry	Areas of the greatest concern that require the most attention during the environmental impact review and the most rigorous analysis and detail in the environmental impact statement. Their purpose is to ensure a comprehensive analysis of the issues that resulted in significant public concern about the proposed development.

GLOSSARY	
Keystone species	A species that is of particular importance to community integrity and function, without which significant changes to the community would occur.
Kimberlite	Igneous rocks that originate deep in the mantle and intrude the earth's crust. These rocks typically form narrow pipelike deposits that sometimes contain diamonds.
Kindergarten	A class for students who fall within five or six years of age.
Labour force	Refers to persons who were either employed or unemployed during the week prior to the survey.
Lacustrine	Of a lake; living or growing in a lake.
Lake turnover	An event of complete or nearly complete vertical mixing that occurs in a lake. This happens when water either has equal density through the vertical column or when upper layers of water have a higher density and are little bit heavier. The latter causes upper layers of water to sink, while deeper, less dense water layers rise, causing an equilibrium to form for all water quality parameters for a certain period of time. The effect usually occurs in the spring and fall.
Landform	A particular type of land formation.
Landscape	Mosaic of patches that differ in ecologically important properties.
Laydown yard	Refers to an equipment and material storage area.
Laydown yard	Refers to an equipment and material storage area.
LC ₅₀	The concentration of a substance required to kill 50% of the individuals in a test population.
Least cost path analysis	A type of optimal path analysis that deals with finding the least-cost route between two locations, based on the measurements of resistance or friction related to physical or environmental conditions. It is a type of GIS model often used when the application requires finding a path across a terrain that may not have any predefined paths. Also known as friction modelling.
L _{eq}	The equivalent continuous noise level. This is a logarithmic average of the measured or predicted noise levels over a given period of time. This type of average takes into account the natural variability of sound.
Lichen veneer	A continuous mat of lichen that appears as a "veneer". These sites are windswept and dry, allowing very little other plant growth. Lichen veneer consists mainly of Iceland moss, several other species of Cetraria, green and black hair lichens, grey mealy lichen, worm lichens and other species.
Life expectancy	The probable number of years remaining in the life of an individual or class of persons determined statistically, affected by such factors as heredity, physical condition, nutrition, and occupation.
Limnology	The study of open fresh and more rarely saline water bodies, specifically lakes and ponds (both natural and manmade), including their physical, chemical, and biological properties. Limnology traditionally is closely related to hydrobiology, which is concerned with the application of the principles and methods of physics, chemistry, geology, and geography to ecological problems.
Limnology profiles	Refers to measurements of water temperature, conductivity, pH, and dissolved oxygen in the water column of a lake.
Lithic	Stone; also used as an alternate word for debitage or flake.
Lithic phase	Any mineral soil having consolidated bedrock within the control section below a depth of 10 cm.

GLOSSARY	
Lithic scatter	An archaeological site type consisting of unworked flakes and/or stone tools; also referred to as an artifact scatter.
Lithology	The systematic description of sediment and rocks, in terms of composition and texture.
Litter	Accumulation of leaves, needles, trigs and other woody materials on the surface of a site. The LFH horizon of soils.
Littoral	The shallow, shoreline area of a lake.
Littoral zone	Shoreline area along water bodies that includes both terrestrial and aquatic habitat where emergent and submerged plant communities are found.
Local study area	The geographic area selected for examining the direct effects of the project on or very near the proposed project's site location.
Lookout	A functional archaeological site type presumed to have served as a strategic location for viewing the surrounding terrain.
Lotic	Relating to or living in moving water.
Low flow	The periodic natural decline in a river's water level as a result of reduced precipitation.
Low income measure	The number and proportion of persons and households whose incomes fall below some fixed percentage of the average or median level of income for their household size and configuration.
Low-centre polygon	An ice-wedge polygon in which thawing of ice-rich permafrost has left the central area in a relatively depressed position.
Lower lift	A soil layer below the upper lift, and of specified thickness, that is selectively removed, stored, and replaced as subsoil in the reclamation process.
Lower trophic	Organisms in an ecosystem that form the bottom of the food chain (benthic invertebrates, zooplankton, and phytoplankton) upon which fish depend as food.
Lowland	Land that is saturated with water long enough to promote wetlands or aquatic processes, indicated by poorly drained soils and hydrophytic vegetation.
Luvisolic	An order of soils that have eluvial (Ae) horizons, and illuvial (Bt) horizons in which silicate clay is the main accumulation product. The soils developed under forest of forest-grassland transition in a moderate to cool climate.
Mafic	A term to describe minerals that contain iron and magnesium.
Magnitude	A measure of the intensity or severity of an impact; it is a measure of the degree of change in a measurement or analysis endpoint.
Major soil	Includes the dominant or co-dominant, significant, and other soils of widely ranging percentage that are necessary to form a mental concept of a soil or map unit.
Map unit	A combination of kinds of soil, terrain, or other feature that can be shown at a specified scale of mapping for the defined purpose and objectives of a particular survey.
Marine deposit	Refers to materials that were deposited in an ocean environment.
Marsh	A mineral or a peat-filled wetlands that is periodically inundated by standing or slowly moving water. Surface water levels may fluctuate seasonally, with declining levels exposing drawdown zones of matted vegetation or mud flats. The waters are nutrient-rich. The substratum usually consists dominantly of mineral material, although some marshes are associated with peat deposits.
Mass wasting	Downslope movement of soil or rock on, or near, the earth's surface under the

GLOSSARY	
	influence of gravity. Mass wasting includes slow displacements such as frost creep, gelifluction or solifluction, and more rapid movements such as earthflows or active-layer failures.
Massive ice	A comprehensive term used to describe large masses of ground ice, including ice wedges, pingo ice, buried ice and large ice lenses.
Matrix, soil	The main soil constituent or material that encloses other soil features such as gravels or concretions embedded in a fine-grained matrix.
Maximum Point of Impingement	The downwind, of emission sources, ground level location where the plumes first touch the ground – herein used to characterize the downwind ground level location (within the RSA and Project fence line) where dispersion modelling results in the maximum ground level concentration or deposition value.
Mean	A value that is computed by dividing the sum of a set of terms by the number of terms.
Mean annual soil temperature	Soil temperature, measured at a specified depth, averaged over a period of a year.
Mean encounter rates	Average number of times (encounters) a caribou collar location occurs within a zone of influence associated with a given development (e.g., mine, exploration camp, etc).
Meander scar	An abandoned channel of a stream or river.
Meandering	Following a winding or intricate course.
Median	A value in an ordered set of values below and above which there is an equal number of values or which is the arithmetic mean of the two middle values if there is no one middle number.
Meltwater channel	A large channel formed by water derived from melting of glacial ice.
Mercury (inorganic)	A toxic heavy metal with low water solubility and bioavailability.
Mesic	Organic materials at a stage of decomposition between that of fibric and humic materials; peat soil material with greater than 10% and less than 40% rubbed fibres; mesic peat usually is classified in the von Post scale as class 5 or 6. See also Horizon, soil.
Meso-	The prefix meaning “middle”.
Mesotrophic	Trophic state classification for lakes characterized by moderate productivity and nutrient inputs (particularly total phosphorus).
Metal burden	The total amount of a metal present at any time after absorption into the body.
Metamorphism	A process by which the texture, composition or mineralogy of a rock is altered by effects of pressure and temperature and can result in a change in the chemical composition of the rock.
Metasediments	Sedimentary rocks that have been modified by metamorphic processes.
Metavolcanics	Volcanic rocks that have been modified by metamorphic processes.
Meteoric water	Groundwater that has recently originated from the atmosphere.
Method blank	A laboratory grade, pure water sample that is subjected to all laboratory procedures. This is used to detect possibility of cross-contamination between samples in the laboratory.
Method detection limit	The minimum concentration of a substance that can be measured and reported with a 99% confidence.

GLOSSARY	
Methylmercury	An organic mercury compound with low water solubility and high bioavailability derived from bacterial metabolism of inorganic mercury.
Mica	A group of monoclinic minerals of the general formula $(K,Na,Ca)(Mg,Fe,Li,Al)_{2-3}(Al,Si)_4O_{10}(OH,F)_2$.
Microclimate	Refers to a local external atmospheric zone where the climate differs from the surrounding area. (i) The climate of a small area resulting from the modification of the general climate by local differences in elevation or exposure. (ii) The sequence of atmospheric changes within a very small region. Refers to a local external atmospheric zone where the climate differs from the surrounding area. Refers to a local external atmospheric zone where the climate differs from the surrounding area.
Micrometre	1/1,000th of a millimetre, or 1/1,000,000th of a metre.
Microtine	Small mammal species (voles) with the genus name <i>Microtus</i> .
Microtopography, microrelief	Small scale, local difference in topography, including mounds, swales, or pits only a few metres in diameter and with elevation differences of up to 2 m.
Migratory	Migration occurs when living organisms move from one biome to another. In most cases organisms migrate to avoid local shortages of food, usually caused by winter or overpopulation. Animals may also migrate to a certain location to breed.
Millisiemen	One one-thousandth of a siemen; a unit of electrical conductance, the reciprocal of ohm.
Mineral soil	A soil consisting predominantly of, and having its properties determined predominantly by, mineral matter.
Minerotrophic	Nourished by mineral water. Refers to wetlands that receive nutrients from flowing or percolating mineral groundwater.
Mitigation	The elimination, reduction or control of the adverse environmental effects of a project, including restitution for any damage to the environment caused by such effects through replacement, restoration, compensation, or any other means.
Modal profile	The soil profile (pedon) with physical, chemical and biophysical characteristics lying close to the centre of the ranges of properties that define a soil series; the most frequently occurring profile within a soil series.
Mode	The most frequently occurring item in a distribution.
Modern	Recent landforms, formed in the last few hundred to few thousand years, which are still actively developing.
Moisture regime	The relative moisture supply at a site available for plant growth.
Moisture tension, soil	In soils partially saturated with water there is moisture tension, which is equal in magnitude but opposite in sign to the soil water pressure. Moisture tension is equal to the pressure that must be applied to the soil water to bring it to a hydraulic equilibrium, through a porous, permeable wall or membrane, with a pool of water at the same composition. Three of the most common pressures used are as follows: 10 kPa Water retention at 10 kilopascals. In coarse textured soils, this is roughly equivalent to moisture content at field capacity. 1,500 kPa Water retention at 1,500 kilopascals. This is roughly equivalent to moisture content at wilting point. 33 kPa Water retention at 33 kilopascals. In medium and fine textured soils, this is

GLOSSARY	
	roughly equivalent to moisture content at field capacity.
Monoclinic	One of the six crystal systems, characterized by either a single twofold axis of symmetry, a single plane of symmetry, or a combination of the two.
Morainal	Of or pertaining to moraine.
Moraine	Sediment generally consisting of well compacted material that is nonstratified and contains a heterogeneous mixture of particle sizes, often in a mixture of sand, silt, and clay that has been transported beneath, beside, on, within and in front of a glacier and not modified by any intermediate agent.
Moraine blanket	Moraine sediment thick enough to mask minor irregularities on the underlying unit, Typical thickness is more than 1 m.
Moraine plateau	Flat topped hummock within a hummocky moraine that is mantled by glaciolacustrine sediments. Formed by deposition from a lake which was situated upon the ice.
Moraine veneer	Moraine sediment too thin to mask minor irregularities in the underlying unit. Typical thickness is less than 1 m.
Morphology, soil	(i) The physical constitution, particularly the structural properties, of a soil profile as exhibited by the kinds, thickness, and arrangement of the horizons in the profile, and by the texture, structure, consistence, and porosity of each horizon. (ii) The structural characteristics of the soil or any of its parts.
Morphometry	A set of linear, area, and volumetric parameters of a water body or watershed that describe geometric features and provide a background for a hydrologic description of a water body or drainage area.
Motor vehicle	A vehicle propelled or driven by power other than by wind, gravity or muscular power and includes a trailer, but does not include: - an aircraft or a marine vehicle; - a device that runs or is designed to run exclusively on rails; and - a mechanically-propelled wheelchair or mobility device.
Mottles, mottling	Spots or blotches of different colour or shades of colour interspersed with the dominant colour; formed mainly by the affects of impeded drainage.
Movement corridor	Travel way used by wildlife for daily, seasonal, annual and/or dispersal movements from one area or habitat to another.
Movers	Are persons who, on Census Day, were living at a different address from the one at which they resided five years earlier.
Mud boil	A process related to frost cracking, followed by freezing of the active layer downward from the ground surface, perpendicular to the frost cracks, and upward from the active layer base.
Mud circle	A type of nonsorted circle developed in fine-grained materials. Synonym: mud boil.
Mudflow	A general term, now often including debris flow and mass flow, for a landform (fan or apron-shaped) and a process characterized by a flowing mass of earth and rock debris possessing a high degree of fluidity during movement.
Mudstone	A sedimentary rock composed of silt and clay-sized particles that breaks along bedding planes much less easily than siltstone or shale.
Muscovite	A clear, dioctahedral layer silicate of themica group with Al ³⁺ in the octahedral layer and Si and Al in a ratio of 3:1 in the tetrahedral layer.
Natal den	A lair, typically underground, used for the birthing and initial rearing of young; often occur in esker complexes.

GLOSSARY	
Natural variability	Disparity in an environmental condition that occurs under natural conditions, without human-induced disturbance.
N-factor	A coefficient applied to an air temperature to obtain the ground surface temperature.
Nipher gauge	A snow gauge designated by the Canadian Atmospheric Environment Service as the standard for snowfall measurement in Canada; it requires the melted contents to be measured in a graduated cylinder.
Nitrate + nitrite	The sum of the concentrations of nitrate and nitrite.
Nitrogen oxides	Consist of nitric oxide (NO) and nitrogen dioxide (NO ₂) and are reported as equivalent NO ₂ .
Noise	The levels of sound that can be heard or measured at a receiver.
Non-marine deposits	Materials that were deposited in a fresh water or deltaic environment.
Non-movers	Are persons who, on Census Day, were living at the same address as the one at which they resided five years earlier.
Non-profit Organizations	Is a legally constituted organization whose objective is to support or engage in activities of public or private interest without any commercial or monetary profit.
Non-renewable Resource	A non-renewable resource is a natural resource that cannot be re-made, re-grown or regenerated on a scale comparative to its consumption. It exists in a fixed amount that is being consumed or used up faster than it can be made by nature.
Nonsoil	The aggregate of surficial materials that do not meet the definition of soil.
Non-vascular plant	Plants that do not possess conductive tissues (e.g., veins) for the transport of water and food.
Normals	Climate “normals” are mean values for a specific location, typically based on a 30-year period of record commencing at the beginning of a decade (i.e., 1961 to 1990, or 1971 to 2000).
Northern plano tradition	Refers to an early Paleo-Indian culture characterized by distinctive lanceolate-shaped spear points; approximately 6500 to 8000 years B.P.
Nutrient regime	The relative supply of nutrients available for plant growth at a given site.
Nutrients	Environmental substances (elements or compounds) such as nitrogen or phosphorus, which are necessary for the growth and development of plants and animals.
Oil & grease	The concentration of all hydrocarbons found in water, whether it is from mineral or petroleum (both artificial and natural) sources.
Oligo-mesotrophic	A lake with low to moderate concentration of nutrients and low to moderate organic productivity.
Oligotrophic	A lake lacking in nutrients and having low organic productivity.
Ombrogenous	Used to describe a peat-forming plant community that derives all its water, and hence dissolved nutrients, from rainfall and other precipitation as opposed to watercourses or below-ground drainage.
Ombrotrophic	A supply of nutrients exclusively from rain water (including snow and atmospheric fallout), therefore making nutrition extremely oligotrophic often in an unbalanced way.
Open water conditions	The period of time when the surface of a water body is completely free of ice.
Open-water season	Summer season when lakes, rivers and streams are free of ice (generally June or July to October).

GLOSSARY	
Order, soil	The highest category in the Canadian system of soil classification. All the soils within an order have one or more characteristics in common.
Organic carbon, soil	The percent by weight of soil carbon in organic forms determined by the difference between total carbon (determined by dry combustion) and inorganic carbon (determined by acid dissolution).
Organic cryosol	An organic soil having a surface layer containing more than 17% organic carbon by weight, with permafrost within 1 m below the surface. In the Canadian System of Soil Classification, Organic Cryosol is more than 40 cm thick, or more than 10 cm thick over a lithic contact, or more than 10 cm thick over an ice layer that is at least 30 cm thick. Organic Cryosols have mean annual ground temperatures below 0°C.
Organic mat	A source of decomposed organic material.
Organic matter, soil	The organic fraction of the soil; included are plant and animal residues at various stages of decomposition, cells and tissues of soil organisms, and substances synthesized by the soil population. It is estimated by multiplying the soil organic carbon content by 1.724.
Organic soil	An order of soils that have developed dominantly from organic deposits. The majority of Organic soils are saturated for most of the year, unless artificially drained, but some of them are not usually saturated for more than a few days. They contain 17% or more organic carbon, and must extend to a minimum depth of 40 cm, or to 10 cm if overlying bedrock.
Organic veneer	Sediments formed by the accumulation of decaying vegetative matter with thickness less than 1 m.
Organized crime	Widespread criminal activities, such as prostitution, theft, or illegal gambling, that occur within a centrally controlled formal structure.
Organochlorine pesticides	Man-made organic chemicals containing chlorine that are used for killing unwanted organisms.
Orthic	A subgroup referring to the modal or central concept of various great groups in the Brunisolic, Chernozemic, Cryosolic, Gleysolic, Luvisolic, Podzolic and Regosolic orders of the Canadian system of soil classification.
Ortho-	In petrology, a prefix that, when used with the name of a metamorphic rock, indicates it was derived from an igneous rock.
Outcrop	That part of a geologic formation or structure that appears at the surface of the earth.
Outflow	Water flowing out of a lake.
Outliers	Data points that fall outside of a given trend line and associated confidence interval, but are part of the original dataset and can have a strong influence on the trend line.
Out-migration	To move out of one community, region, or country in order to reside in another.
Outwash	Stratified sediments (chiefly sand and gravel) deposited by meltwater streams in front of the end moraine or the margin of an active glacier.
Overburden	Materials of any nature, consolidated or unconsolidated, that overlie a deposit of useful materials. In the present situation, overburden refers to the soil and rock strata which overlie kimberlite deposits.
Ozone	A gas that occurs both in the Earth's upper atmosphere and at ground level. Ozone in the upper atmosphere protects living organisms by preventing damaging ultraviolet light from reaching the Earth's surface. Ground-level ozone is an air pollutant with harmful effects on the respiratory systems of animals.

GLOSSARY	
Palsa	A peaty permafrost mound possessing a core of alternating layers of segregated ice and peat or mineral soil material. Palsas are typically between 1 and 7 m in height and a few metres to 100 m in diameter.
Palsa bog	A poorly-drained lowland underlain by organic-rich sediments, which contains perennially frozen peat bodies (peat plateau) and occasionally palsas. Palsa bogs occur in subarctic lowlands and are characteristic of the zone of discontinuous permafrost.
Paludification	The process of peat accumulation leading to peatland formation over previously forested land, grassland or bare rock.
Parallel data sets	Two data sets covering the same period of record, measuring different quantities or adjustments of a single quantity.
Parent material	Refers to the underlying geological material (generally bedrock or a superficial or drift deposit) in which soil horizons form.
Participation rate	The percentage of persons 15 years of age and over who are in the labour force.
Particle size	The effective diameter (grain size) of a particle measured by sedimentation, sieving, or micrometric methods.
Particle-size analysis	The determination of the various amounts of the different separates in a soil sample, usually by sedimentation, sieving, micrometry, or combinations of these methods. Has been called grain-size analysis or mechanical analysis.
Particle-size distribution	The amounts of the various soil separates in a soil sample, usually expressed as percentage of sand, silt, and clay.
Particulate matter	Any aerosol that is released to the atmosphere in either solid or liquid form.
Parturient	Of or relating to or giving birth.
Parturition	The process of giving birth.
Passerines	Perching birds, mostly small and living near the ground with feet having four toes arranged to allow for gripping the perch; most are songbirds.
Patch	An area that is different from the area around it (e.g., vegetation types, non-forested areas). This term is used to recognize that most ecosystems are not homogeneous, but rather exist as a group of patches or ecological islands that are recognizably different from the parts of the ecosystem that surround them but nevertheless interact with them.
Patch density	The number of patches per 100 hectares divided by total landscape area. Patch density equals the number of patches of the corresponding patch types (NP) divided by total landscape area, multiplied by 10,000 and 100 (to convert to 100 hectares).
Patch richness	A measure of the number of different patch types that occur within a study area or landscape unit within a study area. The patch types used here are vegetation units.
Patterned (ribbed)	A type of surface expression associated with fen peatlands and consisting of a pattern of parallel or reticulate low ridges.
Patterned ground	A general term for any ground surface exhibiting a discernibly ordered, more or less symmetrical, morphological pattern of ground and, where present, vegetation. Some patterned ground features are not confined to permafrost regions but they are best developed in regions of present or past intensive frost action. A descriptive classification of patterned ground includes such features as nonsorted and sorted circles, nets, polygons, steps and stripes, and solifluction features. In permafrost regions, the most ubiquitous macro-form is the ice-wedge polygon, and a common micro-form is the nonsorted circle. The latter includes

GLOSSARY	
	mud boils, mud hummocks, frost boils, stony earth circles, earth hummocks, turf hummocks, thufa and tundra hummocks. Patterned ground also occurs in peatlands in the form of string fens and other peatland features.
Peat	A material composed almost entirely of organic matter from the partial decomposition of plants growing in wet conditions.
Peat bog	Sphagnum or forest peat materials formed in an ombrotrophic environment due to the slightly elevated nature of the bog, which tends to disassociate it from the nutrient-rich groundwater or surrounding mineral soils. Characterized by a level, raised or sloping peat surface with hollows and hummocks.
Peat plateau	A generally flat-topped expanse of peat, elevated above the general surface of a peatland, and containing segregated ice that may or may not extend downward into the underlying mineral soil.
Peat plateau bog	Sharply defined and raised areas composed of perennially frozen peat. The surface sets about 1 m higher than the unfrozen fen that surrounds it. The surface is flat, even, and often covers large areas. These bogs are common in areas of discontinuous permafrost.
Peatland	Peat-covered terrain. There is no minimum thickness of peat required for the terrain to be classified as "peatland". In Canada, peatland is defined as a type of wetlands formed by the accumulation of plant remains with limited decomposition.
Pedogenesis	The mode of origin of the soil, especially the processes or soil-forming factors responsible for the development of the solum, the true soil, from unconsolidated parent material. Also called soil genesis.
Pedogenic	Pertaining to the mode of origin of the soil, especially the processes or soil forming factors responsible for the development of the solum.
Pedology, pedological	The aspects of soil science dealing with the origin, morphology, genesis, distribution, mapping, and taxonomy of soils, and classification in terms of their use.
Pelagic	Relating to fish or other aquatic organisms that live offshore in the middle or lower part of the water column.
Peneplain	An area which has been reduced by erosion to a low, gently rolling surface resembling a plain.
Penstock	The pipeline that carries water from the reservoir to the turbine.
Perched water table	A water table due to the 'perching' of water on a relatively impermeable layer at some depth within the soil. The soil within or below the impermeable layer is not saturated with water.
Percolation	The downward movement of water through saturated or nearly saturated soil.
Periglacial	The conditions, processes and landforms associated with cold, nonglacial environments. Many, but not all, periglacial environments possess permafrost; all are dominated by frost action processes.
Periglacial phenomena	Landforms and soil characteristics produced by periglacial processes. Periglacial phenomena include landforms like seasonal and perennial frost mounds, as well as the frost induced microstructures in soils.
Periglacial processes	Processes associated with frost action in cold, nonglacial environments. Periglacial processes include frost jacking, frost sorting, frost wedging, cryoturbation, and the development of frost induced microstructures in soils.
Periphyton	Algae and small crustaceans that live attached to rocks and other substrates projecting from the bottom of a stream or lake.

GLOSSARY	
Permafrost	Perennial frozen ground (subsoil), occurring wherever the temperature remains below zero degrees for several years, whether the ground is actually consolidated by ice or not and regardless of the nature of the rock and soil particles of which the earth is composed. Permafrost areas are divided into more northern areas in which permafrost is continuous, and those more southern areas in which patches of permafrost alternate with unfrozen ground.
Permafrost region	A region in which the temperature of some or all of the ground below the seasonally freezing and thawing layer remains continuously at or below 0°C for at least two consecutive years. The permafrost region is commonly subdivided into permafrost zones.
Permafrost table	The upper boundary surface of permafrost.
Permafrost thickness	The vertical distance between the permafrost table and the permafrost base. The thickness of permafrost may range from less than 1 m to more than 1000 m.
Permafrost zone	A major subdivision of a permafrost region. A permafrost region is commonly subdivided into permafrost zones based on the proportion of the ground that is perennially cryotic. The basic subdivision in high latitudes is into zones of continuous permafrost and discontinuous permafrost.
Permeability, soil	The ease with which gases and liquids penetrate or pass through a bulk mass of soil or a layer of soil. Because different soil horizons vary in permeability, the specific horizon should be designated.
Perviousness	The potential of a soil to transmit water internally, as inferred from soil characteristics such as structure, texture, porosity, cracks, and shrink-swell properties.
Petrology	That branch of geology dealing with the origin, occurrence, structure, and history of rocks, especially igneous and metamorphic rocks.
pH	The negative log of the concentration of the hydronium ion. The pH is a measure of the acidity or alkalinity of all materials dissolved in water, expressed on a scale from 0 to 14, where 7 is neutral, values below 7 are acidic, and values over 7 are alkaline.
Ph, soil	The negative logarithm of the hydrogen-ion activity of a soil solution (q.v.). The degree of acidity or alkalinity of a soil as determined by means of a suitable electrode or indicator at a specified moisture content or soil-water (or CaCl ₂ solution) ratio, and expressed in terms of the pH scale.
Phase, soil	A subdivision of a soil type or other unit of classification having characteristics that affect the use and management of the soil but which do not vary sufficiently to differentiate it as a separate type. A variation in a property or characteristic such as depth of lime, degree of erosion, content of stones, etc.
Physical violence	Where one person inflicts physical violence or pain on another. This can range from pushing and shoving to hitting, beating, torture, or in the end, murder.
Physiography	The physical nature of the land; it includes topography (the relief and contours of the land), elevation, aspect, slope, surface pattern of landforms, and drainage.
Phytoplankton	Small, usually microscopic, plants that live in the water column of lakes and make their food through primary production.
Piezometer	A standpipe placed in the ground to measure water levels.
Piezometric level	The level to which water will rise if a standpipe is installed.
Pingo	A perennial frost mound consisting of a core of massive ice, produced primarily by injection of water, and covered with soil and vegetation. Pingos occur in both the continuous and discontinuous permafrost zones. Most pingos are conical,

GLOSSARY	
	somewhat asymmetric, and have a circular or oval base and a fissured top that may be cratered.
Piping	Erosion of percolating water in soil, resulting in caving and in the formation of narrow conduits and tunnels through which soil particles are removed.
Piscivore; piscivorous	Refers to animals whose diet is primarily composed of fish.
Pit den	A pit den is a shallow bowl in the sand that is more exposed than typical den sites found near the treeline.
Plain	An extensive tract of flat land or an undulating terrain without prominent hills or depressions.
Planktivore	An animal which feeds primarily on plankton.
Plankton	Small, often microscopic, plants (phytoplankton) and animals (zooplankton) that live in the open water column of lakes. They are an important food source for many larger animals.
Plant association	Broadly defined as a unit of vegetation with a uniform composition of plant species and physical structure. Plant associations tend to occupy characteristic habitats.
Plant community	A collection of plants that live together on a relatively uniform area of land with a floristic composition and structure that is distinct from surrounding vegetation.
Platy	Consisting of soil aggregates that have developed predominantly along the horizontal axes; laminated; flaky.
Plutonic	Pertaining to igneous rocks that are formed deep within the earth. The process of intrusion of igneous rock formed at great depth into the earth's crust.
Plutonism	The process of intrusion of igneous rock formed at great depth into the earth's crust.
Podzolization	A process of soil formation in which Fe (iron) and/or Al (aluminum) complexes with organic matter are moved downward into the B horizon from the A horizon, resulting in concentration of Si (silica) in the A horizon.
Point location or satellite location	Refers to the specific location in space, generally denoted by GPS coordinates. Satellite telemetry tracks the movements and locations of animals remotely when GPS locations from the collar are transmitted to a satellite and then downloaded to a computer.
Point source	Major stationary emission source discharging from a stack.
Polyaromatic hydrocarbons	Contaminants formed during the extraction or burning of coal, oil, gas, wood, rubbish and other organic substances.
Polycyclic aromatic hydrocarbons	A chemical by-product of petroleum-related industry. Aromatics are considered to be highly toxic components of petroleum products. PAHs, many of which are potential carcinogens, are composed of at least two fused benzene rings. Toxicity increases along with molecular size and degree of alkylation of the aromatic nucleus.
Polygon	The spatial area delineated on a map to define one feature unit (e.g., one type of ecosite phase).
Polygonal pattern	A pattern consisting of numerous multi-sided, roughly equidimensional figures bounded by more or less straight sides.
Polygonal peat plateau	A peat plateau with ice-wedge polygons. Polygonal peat plateaus are commonly found near the boundary between the zones of discontinuous and continuous permafrost.

GLOSSARY	
Poor fen	An ecosite that is transitional between fen and bog. A poor fen is intermediate in nutrient regime and is similar floristically to the fen and bog. Sedges and peat moss, golden and brown mosses compose the majority of the organic matter content.
Population	A group of organisms of the same species occupying a particular space at a particular time.
Population viability analysis (PVA)	A statistical model that considers species characteristics and environmental variability to forecast population extinction risk.
Pore	A void or space in a soil or rock not occupied by solid mineral material.
Pore ice	Ice occurring in the pores of soils and rocks.
Pore water	Water occurring in the pores of soils and rocks.
Porosity, soil	The volume percentage of the total bulk not occupied by solid particles.
Potential evapotranspiration	The calculated maximum evapotranspiration that can occur in a given weather situation with a low-growing crop that is not short of water and does not completely shade the ground.
Potential labour supply	Those persons who are unemployed. They can be classified into various categories including those who want to do rotational work, gender, ethnicity, or level of schooling. Refers to persons who are unemployed, but are looking and are available for work.
Potentiometric	Synonym to piezometric.
Pothole	A term used to refer to a wetlands, usually smaller than 5 ha, lying in a shallow undrained depression, that contains standing water only during the wettest parts of most years.
Poverty	An inability for people to meet their basic needs. The state or condition of having little or no money, goods, or means of support.
Precambrian	All geologic time, and its corresponding rocks, before the beginning of the Paleozoic; it is equivalent to about 90% of geologic time.
Precision	The closeness to each other of repeated measurements of the same quantity.
Prehistoric	Refers to the period of time before written records; also known as pre-contact.
Primary school	School classes for students in grades 1 to 6.
Private housing	Housing that is not administered by a government entity and does not receive rents subsidies from the government.
Productive forest	Forests on lands with a capability rating of equal to or greater than three, and stocked with enough trees to meet the standards of a merchantable forest.
Productivity	The ratio of juveniles to adult females.
Productivity, soil	The capacity of a soil, in its normal environment, to produce a specified plant or sequence of plants under a specified system of management.
Profile, soil	A vertical section of the soil through all its horizons and extending into the parent material.
Proglacial	Immediately in front of or just beyond the outer limits of a glacier or ice sheet, generally at or near its lower end; said of lakes, streams, deposits, and other features produced by or derived from the glacier ice.
Propagule	A propagule is any plant material used for the purpose of plant propagation. Examples include seeds and stems.

GLOSSARY	
Proterozoic	The latest of two great divisions of the Precambrian.
Psychological violence	Refers to the use of tactics to undermine an individual's self confidence, self esteem and self worth, or the ability to manipulate and create fear.
Public housing	Housing that is provided and administered by the NWT Housing Corporation.
Puddling hazard	Soil puddling is the process by which the structure of the surface soil layer is destroyed through the realignment of clay particles, ultimately leading to restricted drainage. The best prevention against soil puddling is to avoid operations during wet periods and to leave the surface organic layer intact.
Quadratic term	A variable that is squared (i.e., distance ² is a quadratic distance variable that is used to determine the critical threshold of caribou distribution and results in an estimate for the zone of influence).
Quality assurance / quality control procedures	A review by field personnel and laboratories of the procedures used in the collection, transport, and analysis of samples.
Quarry	An archaeological site type where outcroppings of a lithic material suitable for stone tool manufacture has been quarried or mined.
Quartz	Crystalline silica, an important rock-forming mineral, SiO ₂ . It is next to feldspar, the commonest mineral, occurring wither in transparent hexagonal crystals or in crystalline or cryptocrystalline masses.
Quaternary	The second period of the Cenozoic era; also, the corresponding system of rocks.
R ²	This is a coefficient of determination, a statistical measure of how well the regression line approximates the real data points.
Radio telemetry	The use of surgically implanted radio transmitters to monitor the location and movement of large-bodied fish.
Rain-to-snow ratio	The proportion of precipitation falling as rain compared to snow.
Range	The geographic limits within which an organism occurs.
Raptor	A carnivorous (meat-eating) bird; includes eagles, hawks, falcons and owls.
Rare plants	A native plant species found in restricted areas, at the edge of its range or in low numbers within a province, state, territory or country.
Reaction, soil	The degree of acidity or alkalinity of a soil, usually expressed as a pH value. Descriptive terms used here with certain ranges in pH are: acid, less than 5.5; neutral, 5.5 to 7.4; alkaline, greater than 7.4.
Receiver	A location where noise levels are measured or predicted.
Recent	Deposits of late post-glacial age, i.e., within the last few hundred to few thousand years. Soils have had insufficient time to develop "normal" profiles.
Recharge	The process by which water is absorbed and added to the subsurface zone of saturation (groundwater).
Reclamation	The process of reconverting disturbed land to its former or other productive uses.
Recruitment	The influx of new organism members into a population due to reproduction (i.e., the number of caribou calves born and surviving to reproductive age).
Redox	Reduction-oxidation: a chemical reaction in which the oxidation number of an atom changes.
Regional centres	Within the context of the Gahcho Kué Project study area, the regional centres are identified as Fort Smith and Hay River. The regional centres have populations

GLOSSARY	
	greater than 2,500 and share demographic characteristics.
Regional study area	A broad area defined for the description of vegetation conditions generally centred on the Project and surroundings, and including areas where indirect effects of the Project might be expected to occur. Includes the local study area.
Registered corporation	A body that is registered with a government and thereby granted a charter recognizing it as a separate legal entity having its own rights, privileges, and liabilities distinct from those of its members.
Regosolic	An order of soils having no horizon development or development of the A and B horizons insufficient to meet the requirements of the other orders.
Regression analysis	A statistical technique used to determine the relationship between a response (dependent) variable and one or more explanatory (independent) variables.
Regulating gates	Gates that control the amount of water flowing out of a reservoir and down to the turbines of a generating facility.
Relative humidity	The ratio of the amount of water vapour in the atmosphere to the amount necessary for saturation at the same temperature. Relative humidity is expressed in terms of percent and measures the percentage of saturation.
Relief	The elevations or inequalities of the land surface when considered collectively.
Residence time	The average length of time water remains in a lake.
Residual material (residuum)	Unconsolidated and partly weathered (physically and chemically) mineral materials formed by the disintegration of consolidated rock in place; includes saprolite.
Resource	Any biotic and abiotic factor directly used by an organism.
Resource availability	A measure of the amount of a resource actually available to an organism.
Resource Selection Functions (RSFs)	Statistical models used to describe the relative use of a habitat class in relation to its availability.
Resource Selection Models or resource selection functions	Statistical functions that quantify the relationship between the observed distribution of a focal species and covariates representative of habitats and human disturbance. The models are used to identify critical resources for animal populations and to predict species occurrence. Typically, the model consists of a number of coefficients that quantify selection for or avoidance of some environmental feature.
Return period	The long-term average interval of time between events of a specified magnitude; also known as a recurrence interval.
Reworked residual	Unconsolidated material principally derived from local bedrock. The material is a mixture of different particle sizes and bedrock types with most of the evidence of stratification lost.
Rich fen	A peatland with moderate to well-decomposed sedge, grass, reed and brown moss peat material formed in eutrophic environments. Mineral-rich waters are at or just above the fen surface. Sphagnum is usually absent or subordinate to other mosses.
Richness	The number of different types of animals present in a sample or at a location.
Ridged	A type of surface expression of mineral landforms, characterized by a long, narrow elevation of the surface, usually sharp crested with steep sides. Ridges may be parallel, subparallel or intersecting.
Rilled	Channeled landscape on inclined slopes that are unidirectional and uniform, and that are typically greater than 400 m in length. Rills are typically 10 to 50 cm

GLOSSARY	
	deep and 50 to 150 cm wide, with lengths sometimes up to 3 kilometres (km). Rills are ephemeral channels, formed by runoff, and can be destroyed by plowing or by frost action.
Riparian	Refers to terrain, vegetation or simply a position next to or associated with a stream, floodplain or standing water body. <i>Riparian habitat</i> refers to the area where a species lives and grows within this interface or riparian area.
Rock	Any naturally formed, consolidated or unconsolidated material, other than soil, composed of two or more minerals or occasionally of one mineral, and having some degree of chemical and mineralogical constancy.
Rolling	Long, regular or smooth, often convex slopes with a cycle distance of about 0.5 to 1 km.
Royalties	Canada Mining Regulations require each mine to pay an annual royalty to the Crown based upon the value of output of the mine. The value of output is defined as the market value of the mine's production minus deductions for such items as transportation, mine and mill operations, etc. Royalties are collected by the NWT government from all companies involved in the extraction of natural resources. Companies pay a percentage of their earnings to the federal government for the use and extraction of these resources.
Royalty rates	Graduated rates of payment to the government based on the output value of the mine.
Rule curves	Rule curves are the historical compromise for water level management that have been established to balance competing interests for target water levels.
Runoff	The portion of precipitation or irrigation water that moves across land as surface flow and enters streams or other surface receiving waters.
Runoff yield	Runoff, including ground water outflow that appears in the stream; water yield is the precipitation minus the evapotranspiration; commonly measured as a depth, equal to the runoff volume divided by the watershed area.
Rut	A general term that refers to the breeding period of mammals, especially the ungulates. During the rut, males exhibit specific behaviours to establish harems or to attract females to mate with.
Saline soil	A non-alkali soil containing soluble salts in such quantities that they interfere with the growth of most crop plants. The conductivity of the saturation extract is greater than 4 dS/cm, the exchangeable sodium percentage is less than 15, and the pH is usually less than 8.5.
Salinity, soil	The amount of soluble salts in a soil, expressed as electrical conductivity in decisiemens per meter (dS/m) and measured by the saturated paste method or equivalent.
Salinization	The process of accumulation of salts in soils.
Saltation	A mode of sediment transport in which particles are moved progressively forward in a series of short intermittent leaps, jumps, hops, or bounces along a surface, (e.g., sand particles skipping downwind by impact and rebound along the ground surface).
Sampling event	Each grab or composite sample collected is referred to as a sampling event.
Sand	(i) As a particle size term: a size fraction between 0.05 and 2.0 mm equivalent diameter, or some other limit (geology or engineering). (ii) As a soil term: a textural class with abundant sand sized particles.
Sand wedge	A wedge-shaped body of sand produced by filling of a thermal contraction crack in soil, with sand either blown in from above or washed down the walls of the

GLOSSARY	
	crack.
Sandstone	A sedimentary rock formed largely of sand-sized particles.
Sand-wedge polygon	A polygon outlined by sand wedges underlying its boundaries. Sand-wedge polygons may be formed by seasonal thermal contraction cracking in areas of deep seasonal frost.
Saturation percentage. Sat %	The volumetric moisture content of the saturated soil paste used to determine electrical conductivity.
Scale	The resolution at which patterns are measured, perceived, or represented. Scale can be broken into several components, including geographic extent, resolution, and other aspects.
Scarp	A steep slope, especially one formed by erosion or faulting.
School attendance rate	The frequency with which a student is present at school. The average school attendance rate is calculated by dividing the total number of days attended by the student population by the total possible days for that student population.
Scour	Erosion by moving water.
Seasonal frost penetration	A surface layer of soil above the permanently unfrozen soil that is alternately frozen each winter and completely thawed each summer. It represents the seasonally frozen ground on permanently unfrozen soil.
Seasonal home range	The area traversed and/or used by animals in its normal activities during a specific season (e.g.: the calving range is used when cows give birth, the rutting range is the area used during the breeding season).
Seasonally frozen ground	Ground that freezes and thaws annually.
Secchi depth	A measure of water clarity, measured by lowering a 20 cm diameter disk (Secchi disk) with alternating black and white coloured quadrants. The shallowest depth at which the disk is no longer visible is the Secchi depth.
Secondary School (High school)	School classes for students in grades 10 to 12.
Sedge	Any plant of the genus Carex, perennial herbs, often growing in dense tufts in marshy places. They have triangular jointless stems, a spiked inflorescence and long grass-like leaves which are usually rough on the margins and midrib. There are several hundred species.
Sediment	Any particulate matter that can be transported by fluid flow and which is eventually deposited as a layer of solid particles on the bed or bottom of a body of water or other liquid.
Sedimentation	The process by which suspended particles in waste water settle to the bottom.
Seep	An area, generally small, where water percolates slowly to the land surface. Synonymous with spring where the flow of water is substantial but includes flows that are very small.
Segregated ice	Ice in discrete layers or ice lenses, formed by ice segregation. Segregated ice can range in thickness from hairline to more than 10 m. It commonly occurs in alternating layers of ice and soil (see Ice lens).
Seismicity	The phenomenon of Earth movement, mainly due to earthquakes.
Senescence	The aging process in mature individuals; the period near the end of an organism's life cycle.

GLOSSARY	
Sensitive	<ol style="list-style-type: none"> 1. Sites or organisms that are particularly vulnerable to harmful effects. 2. A general status rank for a species with one or more of the following indicators: a small population size or restricted distribution, a declining population trend and/or moderate threats to its population of habitats. 3. In statistics, parameter sensitivity refers to a series of tests in which different parameter values are set to see how a change in the parameter causes a change in the dynamic behaviour of the system in question (e.g., how much does a change in adult female survival affect population growth of a caribou herd).
Separates, soil	Mineral particles, less than 2.0 mm in equivalent diameter, ranging between specified size limits. The names and size limits of separates recognized by soil pedologists in Canada and the United States are: very coarse sand, 2.0 to 1.0 mm; coarse sand, 1.0 to 0.5 mm; medium sand, 0.5 to 0.25 mm; fine sand, 0.25 to 0.10 mm; very fine sand, 0.10 to 0.05 mm; silt, 0.05 to 0.002 mm; clay, less than 0.002 mm; and fine clay, less than 0.0002 mm.
Seral stage	In an ecological succession, the series of biotic communities that follow one another on the way to the stable stage, or climax community.
Series, soil	A category (or level) in the Canadian system of soil classification. This is the basic unit of soil classification, and consists of soils that are essentially alike in all major profile characteristics except the surface texture.
Sexual assault	Conduct of a sexual or indecent nature toward another person that is accompanied by actual or threatened physical force or that induces fear, shame, or mental suffering.
Sexually transmitted disease	Any disease characteristically transmitted by sexual contact, as gonorrhea, syphilis, genital herpes, and chlamydia.
Shale	A sedimentary rock composed of clay and silt sized particles that splits readily along bedding planes.
Shannon's evenness index	Distribution of area among or within patch types in the landscape.
Shield archaic tradition	An archaeological culture that follows and may have evolved from the Northern Plano Tradition; approximately 3500 to 6500 years B.P.
Shoal	A shallow, offshore reef in a lake.
Shrub	A woody perennial plant differing from a tree by its low stature and by generally producing several basal shoots instead of a single trunk.
Significant	A major soil (or other feature) that is clearly subordinate (subdominant) to the dominant. The typical range of proportions of a significant soil is 15 to 40%.
Silt	<p>As a particle size term: a size fraction between 0.002 and 0.05 mm equivalent diameter, or some other limit (geology or engineering).</p> <p>As a soil term: a textural class with abundant silt sized particles.</p>
Siltstone	A sedimentary rock with at least two thirds silt-sized particles
Slope	The degree of deviation of a surface from horizontal, measured in a numerical ratio, percent and degree.
Sloping	A type of surface expression associated with peatlands, consisting of a peat surface with a generally constant slope not broken by marked irregularities.
Sluice	A water channel that is controlled at its head by a gate (sluice gate).
Snag	A naturally occurring, standing dead or dying tree often missing a top or most of the smaller branches. It plays an important role in providing habitat for a variety of forest-dwelling wildlife species as well as epiphytic lichens.

GLOSSARY	
Snow water equivalent	The depth of water that would result from melting the snow accumulated in a given area.
Snowdrift	An accumulation of wind-blown snow, commonly considerably thicker than the surrounding snow cover.
Social support	The physical and emotional comfort given to individuals by family, friends, co-workers and others.
Sodic soil	A soil containing sufficient sodium (exchangeable-sodium percentage of 15 or more) to interfere with the growth of most crop plants.
Software	A set of instructions to program a computer or other 'smart' device.
Soil	The naturally occurring, unconsolidated mineral or organic material at least 10 cm thick that occurs at the earth's surface and is capable of supporting plant growth. Soil extends from the earth's surface through the genetic horizons, if present, into the underlying material, normally about 1 to 2 m. Soil development involves climatic factors and organisms, conditioned by relief and water regime, acting through time on geological materials.
Soil complex	A mapping unit used in detailed and reconnaissance soil surveys where two or more defined soil units are so intimately intermixed geographically that it is impractical, because of the scale used, to separate them.
Soil drainage classes	Seven classes that describe the overall natural drainage of soils, taking into account factors of external (surface runoff) and internal (perviousness) soil drainage in relation to supply of water. The classes from driest to wettest are very rapidly, rapidly, well, moderately well, imperfectly, poorly, and very poorly drained. Each describes water removal from the soil in relation to supply, and can be equated with a range in available water storage capacity.
Soil heat flux	The soil heat flux constant is a function of the surface properties and is used to compute the flux of heat into the soil.
Soil map	A map showing the distribution of soil types, classes, or other soil mapping units in relation to the prominent physical and cultural features of the earth's surface.
Soil survey	The systematic examination of an area having the purpose of describing, classifying and mapping its soils. Soil surveys are classified according to the kind and intensity of the field examination.
Soil temperature limitations	Soil temperature is related to seedling growth and survival. In cold soils, the rate of root development and the ability of plants to uptake water is considerably reduced. Opportunities exist to increase soil temperatures using various site preparation methods that loosen and expose mineral soil to the sun.
Soil wedge	A wedge-shaped body of soil that is different in structure and texture from the surrounding soil.
Solar radiation	The principal portion of the solar spectrum that spans from approximately 300 nanometres (nm) to 4,000 nm in the electromagnetic spectrum. It is measured in W/m^2 , which is radiation energy per second per unit area.
Solifluction	Slow downslope flow of saturated unfrozen earth materials, resulting in development of topographic features such as lobes, aprons, sheets, terraces, and stripes.
Soligenous	Referring to peatlands with water percolating through them and carrying minerals into the peatland from outside sources.
Solum, soil (plural sola)	The upper horizons of a soil in which the parent material has been modified and in which most plant roots are contained. It usually consists of the A and B horizons.

GLOSSARY	
Solution, soil	The aqueous liquid phase of the soil and its solutes consisting of ions dissociated from the surfaces of the soil particles and of other soluble materials.
Sorted circle	A patterned ground form that is equidimensional in several directions, with a dominantly circular outline, and a sorted appearance commonly due to a border of stones surrounding a central area of finer material.
Sorted net	A type of patterned ground with cells that are equidimensional in several directions, neither dominantly circular nor polygonal, with a sorted appearance commonly due to borders of stones surrounding central areas of finer material.
Sorted polygon	A patterned ground form that is equidimensional in several directions, with a dominantly polygonal outline, and a sorted appearance commonly due to a border of stones surrounding a central area of finer material.
Sorted step	A patterned ground feature with a step-like form and a downslope border of stones embanking an area of relatively fine-grained bare ground upslope.
Sorted stripe	Sorted stripes form patterned ground with a striped and sorted appearance, due to parallel strips of stones and intervening strips of finer material, oriented down the steepest available slope.
Sound	The acoustic energy generated by natural or human-made sources, including the project activities.
Sound exposure level	The sound level for an exposure of one minute that has the same noise energy as the L_{eq} for a set period.
SO _x	Sulphur oxides.
SO ₂	Sulphur dioxide gas.
Spatial	Relating to size, area, or position; aerial extent.
Species	A group of organisms that actually or potentially interbreed and are reproductively isolated from all other such groups; a taxonomic grouping of genetically and morphologically similar individuals; the category below genus species abundance the number of individuals of a particular species within a biological community (e.g., habitat).
Species at risk act (SARA)	A key federal government commitment to prevent wildlife species from becoming extinct and secure the necessary actions for their recovery. It provides for the legal protection of wildlife species and the conservation of their biological diversity.
Species diversity	Number, evenness, and composition of species in an ecosystem; the total range of biological attributes of all species present in an ecosystem.
Species evenness	A measure of equitability calculated to incorporate the sum of the proportional contributions of an individual species to the total population of a community.
Species richness	The number of different species occupying a given area.
Specific conductivity	(See also Conductivity). A conductivity reading normalized to a temperature of 25°C. This allows valuable comparisons to be made.
Specific heat capacity	The amount of heat required to raise the temperature of a unit mass of a substance by one degree. Specific heat capacity is commonly expressed in Joules per kg per degree K.
Spike sample	A laboratory produced sample containing a known concentration of a given parameter to measure the accuracy of laboratory equipment.
Spillway	The channel or passageway around or over a dam through which excess water is released or spilled without passing through the turbines; a safety valve for the dam.

GLOSSARY	
Spot measurement	An in situ measurement taken near the surface of the water column.
Stage-discharge rating curve	An equation relating water surface elevation at a specific location to discharge rate at a specific location.
Staging	Staging by water birds refers to a gathering of birds at a particular site for an extended period of time (days to weeks) before continuing migration.
Staging areas	Staging areas provided seasonally suitable habitat requisites such as early open water and associated foraging areas.
Standard deviation	A measure of the spread or dispersion of a set of data. It is calculated by taking the square root of the variance.
Standard error	A measure of the sampling variability or precision of an estimate. The SE of an estimate is expressed in the same units as the estimate itself. It is calculated as the standard deviation divided by the square root of the number of observations.
Static cryosol	A mineral soil showing little or no evidence of cryoturbation, with permafrost within 1 m below the surface (Canadian System of Soil Classification). Static cryosols occur most commonly in coarse-textured materials, and patterned ground features may or may not be present. They have mean annual ground temperatures below 0°C.
Steep	A type of surface expression of mineral landforms, consisting of erosional slopes, greater than 70% (35°C), occurring on both consolidated and unconsolidated materials.
Stochastic	Involving or containing a random variable or variables; involving chance or probability.
Stone channel	Snow meltwater and runoff washed out the soil matrix, leaving a stoney material (cobbles, boulders, and rock fragments) in form of channel.
Stones	Rock fragments greater than 25 cm in diameter if rounded and greater than 38 cm along the greater axis if flat.
Stratification	The arrangement of sediments in layers or strata marked by a change in colour, texture, size of particles, and composition.
Structural stage	General structural stage of a plant community, defined in relation to its overall appearance and general age class, ranging from classes of open, moss-dominated, herb-dominated, shrub-dominated or tree-dominated.
Structure, soil	The combination or arrangement of primary soil particles into secondary particles, units, or peds. These peds may be, but usually are not, arranged in the profile in such a manner as to give a distinctive characteristic pattern. The peds are characterized and classified based on size, shape, and degree of distinctness into classes, types, and grades. The soil structure classes are described below.
Study area	An arbitrary spatial extent chosen by the investigator within which to conduct a study.
Sub-basin	A discrete part of a basin, which partially separates land features or a shallow lake bed.
Subglacial	Formed or accumulated in, or by the bottom parts of a glacier or ice sheet.
Subgroup, soil	A category in the Canadian system of soil classification. These soils are subdivisions of the great groups, and therefore are defined more specifically.
Subhydic	Soil moisture conditions where water is removed slowly enough to keep the water table at or near the surface for most of the year; organic and gleyed mineral soils are present as well as permanent seepage less than 30 cm below the surface.

GLOSSARY	
Sublimation	Phase transition from solid to gas without an intermediate liquid phase.
Subsoil	The B horizons of soils with distinct profiles. In soils with weak profile development, the subsoil can be defined as the soil below the plowed soil (or its equivalent of surface soil) in which roots normally grow.
Substrate	The material which comprises the bottom of a water body; described by substrate particle size.
Sub-watershed	A smaller portion of a watershed containing a drainage area that is connected to the larger portion by a single channel.
Succession	Any change in the quality or quantity of vegetation in a community due to maturation or fluctuation of species.
Successional stage	A particular phase of the forest succession continuum with its own characteristic of age, structure and composition of species. Stages may include the following: pioneer, young seral, maturing seral, old seral, young edaphic, mature edaphic, young climatic, mature climatic and disclimax.
Supervised image classification	Automated mapping methodology typically composed of three stages: training, classification, and output. The training stage involves the identification of training areas and associated spectral responses that correspond to various land cover categories. The classification stage compares each unknown pixel to the spectral patterns identified during the training stage and assigns them to the most appropriate land cover category. The output stage allows for the presentation of results, either as maps, tables, or GIS data files. From Lillesand et al. (2004).
Supraglacial	Situated or occurring at or immediately above the surface of a glacier or ice sheet; said of till, drift, meltwater streams, etc.
Surface area	The area of the lake water surface, excluding islands.
Surface expression	The form (assemblage of slopes) and pattern of forms of parent genetic materials.
Swale	An elongated depression in the land surface that is at least seasonally wet, is usually heavily vegetated, and is normally without flowing water.
Swamp	A peat-filled area or a mineral wetlands with standing or gently flowing waters occurring in pools and channels. The water table is usually at or near the surface. There is strong water movement from margin or other sources, hence the waters are nutrient-rich. If peat is present, it is mainly well decomposed forest peat underlain at times by fen peat.
Tagline	A tape or cord with markers at defined intervals, used to measure distances along a transect.
Taiga	Sub-Arctic, coniferous forest that is considered to be a transition between the boreal forest and the tundra (barrenlands).
Tailings	Residue of raw material or waste separated out during the processing of mineral ores.
Tailings impoundment	A waste disposal area for tailings, often surrounded by one or more confining dams.
Tailrace	A pipe or channel through which water from a turbine is discharged into a river.
Talik	A permanent or temporary layer of unfrozen ground occurring above, within, or below permanently frozen ground; taliks commonly form beneath lakes in areas of permafrost.
Taltheilei tradition	An archaeological culture that is associated with the Athapaskan occupation and followed the Arctic Small Tool Tradition; approximately 200 to 2500 years B.P.

GLOSSARY	
Tax	A sum of money demanded by a government for its support, or for specific facilities or services, levied upon incomes, property, sales, etc.
Taxon	A group of organisms at the same level of the standard biological classification system; the plural of taxon is taxa.
Tectonic	Pertaining to the internal forces involved in deforming the earth's crust.
Tectonism	The movement and deformation of the earth's crust.
Temporal	Through time.
Temporal variability	Seasonal or a variation over time.
Tent ring	A functional name for an archaeological feature; a ring of rocks presumably used to hold down the cover of a tent or tipi-like structure.
Terms of Reference	Written requirements governing environmental impact assessment implementation, consultations to be held, data to be produced and form/contents of the environmental impact assessment report.
Terrace	A nearly level, usually narrow plain bordering a river or lake. Rivers sometimes are bordered by a number of terraces at different levels.
Terrain	The landscape, or lay of the land. The term comprises specific aspects of the landscape, namely genetic material, material composition, landform (or surface expression), active and inactive processes (e.g., permafrost, erosion) that modify material and form, slope, aspect, and drainage conditions.
Terrain unit	An area enclosed by a boundary line on a terrain map to represent similar surficial material, texture and other features.
Terrestrial	Living or growing on land.
Terric layer	An unconsolidated mineral substratum underlying organic soil material.
Territory	The spatial extent defended by an animal or group of animals. Typically a subset of, but may include all of, the overall home range.
Test pit	An excavation unit used to determine whether artifacts are present below the soil surface.
Texture, soil	<p>The relative proportions of the various soil separates in a soil as described by the classes of soil texture. The limits of the various classes and subclasses are given below:</p> <p>sand (S) Soil material that contains 85% or more sand.</p> <p>Loamy sand (LS) Soil material that usually contains 70 to 85% sand but may contain as much as 90% sand depending upon the amount of clay present. Also loamy very fine sand (LVFS), loamy fine sand (LFS), loamy coarse sand (LCS).</p> <p>Sandy loam (SL) Soil material that usually contains 52 to 70% sand but may contain as much as 85% and as little as 43% sand depending upon the content of clay. Also very fine sandy loam (VL), fine sandy loam (FL), coarse sandy loam (CSL).</p> <p>Loam (L) Soil material that contains 7 to 27% clay, 28 to 50% silt, and less than 52% sand.</p> <p>Silt loam (SiL) Soil material that contains 50% or more silt and 12 to 27% clay, or 50 to 80% silt and less than 12% clay.</p> <p>Silt (Si) Soil material that contains 80% or more silt and less than 12% clay.</p> <p>Sandy clay loam (SCL) Soil material than contains 20 to 35% clay, less than 28% silt, and 45% or more sand.</p> <p>Clay loam (CL) Soil material that contains 27 to 40% clay and 20 to 45% sand.</p>

GLOSSARY	
	<p>Silty clay loam (SCL) Soil material that contains 27 to 40% clay and less than 20% sand.</p> <p>Sandy clay (SC) Soil material that contains 35% or more clay and 45% or more sand.</p> <p>Silty clay (SiC) Soil material that contains 40% or more clay and 40% or more silt.</p> <p>Clay (C) Soil material that contains 40% or more clay, less than 45% sand, and less than 40% silt.</p> <p>Heavy clay (HC) Soil material that contains more than 60% clay.</p>
Thaw index	A sum of hourly/daily/monthly positive air temperatures for the annual term.
Thermal conductivity	The quantity of heat transmitted during a period of time through a unit thickness of soil in a direction normal to a surface of area due to a unit temperature difference, under a steady state conditions.
Thermal stratification	Horizontal layers of differing densities produced in a lake by temperature changes at different depths.
Thermistor	A semiconductor which resistance is sensitive to a temperature change. Thermistors are broadly used for soil temperature measurements.
Thermocline	The vertical zone in the water column where temperature changes by more than 1°C per metre of depth.
Thermoerosion	The general process whereby frozen soils initially are thawing and simultaneously removed from one place to another usually by melting water.
Thermokarst	The process by which characteristic landforms result from the thawing of ice-rich permafrost or the melting of massive ice.
Thermokarst lake	A lake occupying a closed depression formed by settlement of the ground following thawing of ice-rich permafrost or the melting of massive ice.
Thermokarst mound	A hummock remaining after melting of the ice wedges surrounding an ice-wedge polygon. Thermokarst mounds occur in groups forming a distinctive surficial network of regularly shaped mounds separated by troughs formed by the melting of ice wedges.
Thermokarst terrain	The often irregular topography resulting from the melting of excess ground ice and subsequent thaw settlement.
Till	Unstratified soil deposited by a glacier; consists of sand and clay and gravel and boulders mixed together.
Tilth	The physical condition of soil as related to its ease of tillage, fitness as a seedbed, and impedance to seedling emergence and root penetration.
Tonalite	Quartz diorite.
Tonality	A sound pressure level measured in an A- rated 1/3 octave band that is 10dBA or more higher than at least one of the adjacent bands.
Topography	The configuration of a surface including its relief and the position of its natural and man-made feature.
Topsoil	<ul style="list-style-type: none"> (i) The layer of soil moved in cultivation. (ii) The A horizon. (iii) The Ah horizon. (iv) Presumably fertile soil material used to topdress road banks, gardens and lawns.
Total core area	A core area is an interior of a patch type that is within a given distance from the patch edge.

GLOSSARY	
Total dissolved solids	The total concentration of all dissolved materials found in a water sample.
Total edge	The perimeter of a patch, or the total distance of the edge of a patch of habitat.
Total Kjeldahl nitrogen	The sum of all organic nitrogen, ammonia (NH ₃), and ammonium (NH ₄)
Total nitrogen	Nitrogen was determined together with carbon using a LECO® C and N Analyzer. The combustion process in this instrument converts elemental C and N into CO ₂ , N ₂ and NO _x . The gases are then passed through infrared cells to measure C and a thermal conductivity cell to measure N.
Total organic carbon	A measure of the concentration of organic carbon in water, determined by the oxidation of the organic matter into carbon dioxide (CO ₂).
Total petroleum hydrocarbons	A measurement of the overall concentration of petroleum hydrocarbons found in the water.
Total phosphorus	A measurement of particulate and dissolved phosphorus and phosphate molecules in water.
Total suspended solids	A measurement of the concentration of particulate matter found in water.
Traditional knowledge	The knowledge, innovations, and practices of indigenous people; refers to the matured long-standing traditions and practices of certain regional, indigenous, or local communities.
Traditional land use	The practices and traditions of land use and resource harvesting by regional, indigenous, and local communities.
Transect	A sample area in the form of a strip used to sample organisms or vegetation.
Transect stationing	Location along a line established between two points in the horizontal plane.
Treeline	An area of transition between the tundra and boreal forest to the south.
Tributary	A stream that flows into a larger stream or lake.
Trip blank	A water sample prepared by the laboratory and shipped to the field sampling location and then subsequently returned to the laboratory unaltered. These samples are used to detect sample contamination during transport.
Trophic	Pertaining to part of a food chain, for example, the primary producers are a trophic level just as tertiary consumers are another trophic level.
Trophic level	In ecology, a relative measure of a species in the food chain. Low trophic level species are decomposers and plants, while high trophic level species are predators.
Trophic state	Eutrophication is the process by which lakes are enriched with nutrients, increasing the production of rooted aquatic plants and algae. The extent to which this process has occurred is reflected in a lake's trophic classification or state: oligotrophic (nutrient poor), mesotrophic (moderately productive) and eutrophic (very productive and fertile).
Tundra	A type of ecosystem dominated by lichens, mosses, grasses, and woody plants; a treeless plain characteristic of the arctic and subarctic regions.
Turbidity	A measure of light penetration dependent on the concentration of suspended solids.
Turbine	A rotary engine that extracts energy from a fluid flow.
Turf hummock	A hummock consisting of vegetation and organic matter with or without a core of mineral soil or stones.
Tussock	A tussock is a tuft of grass or grasslike plants like sedges.

GLOSSARY	
Tussock - hummock	A tussock is a tuft of grass or grasslike plants like sedges. Tussock –hummock refers to a type of tundra consisting of acre upon acre of sedge tussocks, usually located on flat, poorly drained land or gentle slopes.
Ultrabasic	Said of an igneous rock having a silica content lower than that of a basic rock.
Ultramafic	Igneous rocks that consist mainly of mafic minerals and low amounts of silica.
Unbounded aerial surveys	Aerial transect did not have a pre-determined area or width within which animals were counted (i.e., no fixed width transects); all animals seen were recorded, regardless of their location with respect to the transect.
Uncertainty	Imperfect knowledge concerning the present or future state of the system under consideration; a component of risk resulting from imperfect knowledge of the degree of hazard or of its spatial and temporal distribution.
Under ice conditions	The period of year when the lakes are partially or completely covered with ice.
Undercatch	The phenomenon whereby a rain or snow gauge measures less than the actual precipitation. Wind turbulence can deflect precipitation from being captured by the gauge, trace events may be too small to measure and wetting of the gauge surface, followed by evaporation, can all cause measured values to be smaller than actual.
Undulating	A wave-like pattern of very gentle slopes with low local relief. Slope length is generally less than 0.5 km and slope gradients are commonly 2 to 5%.
Unemployment rate	The percentage of the labour force that was unemployed during the week prior to the survey.
Ungulate	Belonging to the former order Ungulata, now divided into the orders Perissodactyla and Artiodactyla, and composed of the hoofed mammals such as horses, cattle, deer, moose, caribou, swine and elephants.
Unicellular	Consisting of a single cell.
Unweighted decibel	A unit of sound or noise measured without any weighting scale applied.
Upland	Ground elevated above the lowlands along rivers or between hills; highland or elevated land; high and hilly country.
Upper lift	A surface soil layer of specified thickness that is selectively removed, stored, and replaced as topsoil in the reclamation process.
Upward freezing	The advance of a freezing front upwards from the permafrost table during annual freezing of the active layer.
Vacancy rate	The percentage of all rental units that are unoccupied or not rented at a given time.
Value of Mineral Production	The total value of all kinds or types of minerals produced in a given period of time.
Value, colour	One of the three variables of colour (Munsell system); expresses the relative lightness of colour, which is approximately a function of the square root of the total amount of light.
Valued components	Represent physical, biological, cultural, and economic properties of the social-ecological system that are considered to be important by society.
Variant	A soil that is dissimilar from all existing series but constitutes less than 800 ha may be designated as a variant of the most closely related, existing series. The series name plus a modifier identify the variant which may then be used in naming map/soil units.

GLOSSARY	
Vascular plant	Plants possessing conductive tissues (e.g., veins) for the transport of water and food.
Vegetation strata	Layers of plant growth based on morphology and normal height of all species. These layers are used to describe the dominant vegetation components of ecosite phases and plant community types in the ecosite classification system. Primary strata include: trees, shrubs, forbs, grasses, mosses and lichens.
Vegetation type	Habitat types classified based on the plant community present.
Veneer	Unconsolidated materials too thin to mask the minor irregularities of the underlying unit surface. A veneer ranges from 10 cm to 1 m in thickness and possesses no form typical of the materials' genesis.
Veneer bog	A bog occurring on gently sloping terrain underlain by generally discontinuous permafrost. Although drainage is predominantly below the surface, overland flow occurs in poorly defined drainways during peak runoff. Peat thickness is usually < 1.5 m.
Vertical mixing	The mixing of different substances through the water column to yield homogeneous concentrations of different parameters throughout a lake.
Vertical profile	An in situ measurement consisting of taking readings of physical parameters or samples at certain depth increments in a water column of a lake.
Volatile organic compounds	Photochemically reactive hydrocarbons, excluding methane, ethane, acetone, methylene chloride, methyl chloroform, and several chlorinated organics, because of their low reactivity in the atmosphere. This is the same definition as the one used by U.S. EPA.
Volume	The loudness of a sound or noise expressed on a logarithmic scale, in units called decibels (dB). Since the scale is logarithmic, a sound or noise that is twice as loud as another will only be three decibels (3 dB) higher. A sound or noise with double the number of decibels is much more than twice as loud. A change of three decibels is also the general threshold at which a person can notice a change in sound volume.
Voluntary sector	Is a diverse sector made up of activities such as sports, recreation, cultural and religious events, social services and environmental services that serve for the common good of society.
Volunteers	People who freely choose to help or serve with an organization, community or do good without the expectation of financial compensation.
Von Post	Humification scale describing peat moss in varying stages of decomposition ranging from H1, which is completely unconverted, to H10, which is completely converted. It is determined by squeezing a peat sample in the hand; criteria are described below.
Water holding capacity	The percentage of water remaining in the soil material after having been saturated and after drainage of free water has practically ceased. The water holding capacity of sandy soils is usually considered to be low while that of clay is high. Often expressed in centimeters of water per meter depth of soil.
Waterlogged	Saturated with water.
Water retention	The soil moisture percentage (by weight or by volume) at a given tension or pressure. See moisture tension, soil.
Water table	(i) The upper surface of groundwater or that level below which the soil is saturated with water. (ii) Groundwater surface or elevation at which the pressure in the water is zero with respect to atmospheric pressure.

GLOSSARY	
Water body	An area of water such as a river, stream, lake or sea.
Watershed	The catchment area that contributes runoff to a given point location. For the purpose of this report, the Taltson Watershed is defined as the runoff area from Nonacho Lake to the outflow of Tsu Lake.
Weakly developed	Refers to calcareous profiles, rego profiles, and profiles that are thinner than normal for the named soils in the soil unit.
Weathering	The physical and chemical disintegration, alteration and decomposition of rocks and minerals at or near the earth's surface by atmospheric agents.
Weir	A low dam built across a stream to raise the upstream water level.
Wetland	Semi-terrestrial sites where the water table is at, near, or above the soil surface and soils are water-saturated for a sufficient length of time that excess water and resulting low soil oxygen levels are principal determinants of vegetation and soils development. Wetlands must have either plant communities characterized by species that normally grow in soils water-saturated for a major portion of the growing season ("hydrophytes"), or soils with surface peat ("O") horizons or gleyed mineral horizons (Bg or Cg) within 30 cm of the soil surface (Mackenzie, 1998). Examples of wetlands include rivers, open marshes and ponds.
Whalebacks	A rock formation shaped like the back of a whale.
Wind rose	Graphic pie-type representation of frequencies of wind directions and speeds over a period of time (e.g., one year) for a meteorological station.
Workshop	An archaeological site type consisting of a significant quantity of debitage suggestive of intensive use of locally available stone to manufacture tools, tool blanks, or performs; commonly located near a quarry or other source of stone material.
Yearling	An animal in its second year.
Young-of-year	An animal younger than one year of age (i.e., born within the year).
Zone of Influence	The surrounding area of a development site in which animal occurrence is reduced, possibly due to avoidance of sensory disturbances or low-quality habitats.
Zooplankton	Small, sometimes microscopic, animals that live in the water column of lakes and mainly eat primary producers (phytoplankton).