Programmatic Environmental Impact Statement For Northern Border Activities

Section 13: Glossary





13 GLOSSARY

Aboriginal Peoples

(Canada)

As recognized by the Canadian Constitution, Aboriginal Peoples are descendants of the original inhabitants of North America and include Indians (commonly designated First Nations), Métis, and Inuit populations.

Air Quality Control

Region (AQCR)

A contiguous area where air quality is relatively uniform. AQCRs may consist of two or more cities, counties, or other governmental entities, and each region is required to adopt consistent pollution control measures across the political jurisdictions involved.

Alfisol A soil order that is primarily clay.

Alkaline tolerant

Ammonite

Plants tolerant of soils with pH above 7; opposite of acid-tolerant. A group of extinct invertebrates; a type of mollusk closely related

to squid and octopus.

Anadromous Sea-run fishes that hatch in and return to their natal freshwater

streams or rivers to spawn.

Andisol Soil with high glass content, such as those in areas of volcanic

activity.

Aquatic nuisance

species

Invasive animal species of concern, including undesirable species

such as quagga or zebra mussels and rusty crayfish.

Aquifer A water-bearing stratum of permeable rock, sand, or gravel.

Aridisol Desert soils that typically develop in arid or semi-arid regions.

Attainment areas A zone within which the level of a pollutant is considered to meet

the National Ambient Air Quality Standards.

ATVs All-terrain vehicles; either three-wheeled or four-wheeled

vehicles capable of traveling off-road or on uneven, rugged

terrain.

A-weighted decibels An expression of the relative loudness of sounds in air as

perceived by the human ear.

Ballast water Water in onboard tanks on large ships to maintain lateral stability

during travel on the ocean or large lakes.

Barren land As defined in the National Land Cover Data Classification

(NLCD) Legend: barren areas of bedrock, desert pavement, scarps, talus, slides, volcanic material, glacial debris, sand dunes, strip mines, gravel pits, and other accumulations of earthen material. Generally, vegetation accounts for less than 15 percent

of total cover.

Basement rocks The oldest rocks in a given area.

Bentonite A type of clay formed from weathering of volcanic ash, usually in

the presence of water.

Biface/bifacial A stone tool modified or flaked on two edges, often used as a

knife or cutting tool.

Bioturbation The displacement and mixing of marine sediments by living

organisms.

Blastoids A common ancient marine fossil called "sea buds" that look like

hickory nuts.

Brachiopods Marine "lampshells" with two hard valves enclosing the body.

Bryozoa Small aquatic invertebrates known as "moss animals."

Carrying capacity The maximum population of a species (as of deer) that an area

will support without undergoing deterioration.

Cephalopods A category of mollusks to which octopus, squid, and cuttlefish

belong.

Champsosaurs Large, semiaquatic, extinct reptiles somewhat similar to

crocodiles.

Child As defined by the U.S. Census Bureau, any unmarried individual

under the age of 18 years.

Class I Class 1 federal lands include areas such as national parks,

national wilderness areas, and national monuments. These areas are granted special air quality protections under Section 162(a) of

the federal Clean Air Act.

Conodonts Small extinct marine organisms that resembled eels and had sharp

teeth.

Continental Divide Natural, high-elevation boundary line separating waters that flow

into the Atlantic Ocean or Gulf of Mexico from those that flow

into the Pacific Ocean.

Core A primary stone piece from which smaller flakes are removed to

fashion finished tools.

Corner-notched

point

A projectile point with characteristic notches at the corners of the

tool's base.

Crinoids Marine organisms known as "sea lilies" or "feather stars."

Criteria pollutants Six primary air pollutants found throughout the United States as

defined by EPA pursuant to the Clean Air Act. They are

particulates, ground-level ozone, carbon monoxide, sulfur oxides,

nitrogen oxides, and lead.

Day-night sound

level

The A-weighted equivalent sound level for a 24-hour period with

10 dB added to levels between 10 p.m. to 7 a.m.

Decibel A logarithmic unit of measurement that expresses the ratio of a

sound pressure level to a standard reference level. The decibel is useful for a wide variety of measurements in science (for this

application, it is sound).

Developed Land cover type that, for the purposes of this report, is a sum of

the following NLCD classifications for development (Open Space, Low Intensity, Medium Intensity, and High Intensity). These areas commonly include housing units, surfaces that are

more than 20 percent impervious (e.g., pavement), and

commercial/industrial complexes.

Dolostone Ancient sedimentary rocks similar to limestone.

Drainage or leach A field used to remove contaminants and impurities from the

field liquid that emerges from the septic tank.

Drumlin An elongated hill formed by glacial ice acting on unconsolidated

soils.

Ecoregion An area defined by environmental conditions and natural features,

including climate, landforms, and soils.

Entisol A young soil with only an A horizon; entisols are the most

extensive soils in the world.

Equivalent sound The level of a steady-state noise without impulses or tone

level components that is equivalent to the actual noise emitted over a

period of time.

Erodibility The measure of susceptibility to erosion, which is the wearing

away of material.

Erosion Breakdown of the continents, bedrock, large rock, or soil

aggregates into smaller components, caused by wind, waves, rain,

snow, or ice.

Erratics Rocks relocated by glaciers or other geologic forces.

Escarpment A steep slope or long cliff that results from erosion or faulting and

separates two relatively level areas of differing elevations.

Esker A long winding ridge of gravel and sand formed by past glaciers.

Evapotranspiration The sum of water from evaporation and plant transpiration to the

atmosphere.

Fir-waves Set of alternating bands of fir trees in consecutive stages of

development; observed in forests on exposed mountain slopes.

Flake tool A small utilized tool made from a single small flake without the

diagnostic characteristics of a finished artifact.

Fledged Successfully emerged from the nest; as in a passerine bird making

its first flight away from the nest.

Forearc The region in a volcanic arc system that separates the volcanic

front from the subducting oceanic plate.

Fossiliferous Containing fossils.

Gastropods A group of animals usually referred to as slugs and snails.

Glare Light reflected off surfaces.

Gondwana The southernmost of two continents formed when the original

supercontinent Pangea broke up.

Graptolites Extinct fossil colonial animals.

Grinder pump A waste management device used in a septic tank that turns on

once the waste inside the tank reaches a specific level and grinds

it.

Groundwater water within the earth especially that supplies wells and springs

Gullying Land and soil depressions created by water erosion.

Gymnosperms A type of seed-bearing plant including modern day conifers and

ginkgo trees.

Herbaceous As defined in the NLCD Classification Legend; Areas dominated

by grammanoid or herbaceous vegetation, generally greater than 80 percent of total vegetation. These areas are not subject to intensive management such as tilling, but can be utilized for

grazing.

Herptiles Amphibians and reptiles.

Hertz A unit of frequency equal to 1 cycle per second.

Histosol Soils that contain primarily organic material that form in areas of

persistent moisture such as wetlands.

Holocene Of, relating to, or being the present epoch of geological history.

Humus A brown or black complex variable material resulting from partial

decomposition of plant or animal matter and forming the organic

portion of soil.

Hydraulic flow The volume of fluid that passes through a given surface per unit

ıme.

Hyoliths Extinct animals with conical shells.

Inceptisol Soils that develop on surfaces that have not had adequate time to

develop soil profiles and thus do not have extensive soil horizons.

Intentional Includes intentional malevolent acts, intentional malicious acts,

destructive act and acts of terrorism.

Intraplate quake An earthquake that occurs inside the tectonic plate, as opposed to

its boundaries.

Intrinsic quality Scenic, historic, recreational, cultural, archaeological, or natural

features that are considered representative, unique, irreplaceable,

or distinctly characteristic of an area.

Karst A terrain formed by the dissolution of layers of limestone.

Kettle lakes Lakes formed when melting glacial ice leaves a depression

surrounded by glacial till, and the depression fills with water.

Keystone species Species for which the impact on its biological community or

ecosystem is disproportionately large in relation to its abundance.

Lanceolate The shape of a tool (usually of flaked stone) in the form of the

head of a lance, oval in outline with a sharp point at one or both

ends.

Land subsidence A gradual or sudden sinking of ground due to subsurface

movement.

Level of Service

(LOS)

A qualitative measure of the operating conditions of an

intersection or other transportation facility. There are six LOS (A

through F) defined; LOS A represents the best operating conditions, with no congestion, and LOS F is the worst, with

heavy congestion.

Linear accelerator

(linac)

The device most commonly used for external beam radiation

treatments for patients with cancer.

Line of sight areas

Lithic

Areas that are in the view.

A flaked stone tool or waste fragment made by a reductive

process of removing flakes and pieces of stone from a larger

piece.

Lithologically

Related to the physical characteristics of a rock or rock formation.

Loam

A soil consisting of a friable (easily crumbled or pulverized)

mixture of varying proportions of clay, silt, and sand.

Loess

Silt deposits from wind activity.

Loess-covered hills

Hills composed of wind-blown silt (fine soil particles).

Low income population

Populations that meet the threshold for poverty established by the U.S. Census Bureau's Population Reports on Income and Poverty. For Canada, the poverty threshold is defined on the basis of "low

income" persons.

Lycopods

Related to modern club mosses; extinct forms were tree-sized.

Madrone

A Coast Range small tree species with very rich brown

(chocolate-colored) bark.

Mélange

A disordered mix of rocks of different shapes, sizes, ages, and

origins.

Mesic

Habitat with a medium or moderate supply of moisture (e.g., a

mesic forest or mesic prairie).

Metamorphosed

rock

Rock that is transformed inside the earth due to high temperature

and pressure.

Microphytic

Plants of microscopic or nearly microscopic size, often forming a

crust on the soil.

Mineral leaching

The loss of minerals by liquid.

Minimum peak horizontal ground

acceleration value

The lowest value of an earthquake-propelled particle's change in

speed at the ground level horizontally.

Minority population Individuals who self-identify as belonging to any of the following

> protected groups: Hispanic (may include individuals of any other category); Black or African American (not of Hispanic origin); American Indian or Alaska Native; and Asian, Native Hawaiian, or Other Pacific Islander. In Canada, Aboriginal Peoples are also

included in the minority category.

Mollisol Organic-rich soils that typically form under grasslands in semi-

arid to semi-humid areas.

Mollusks A large group of invertebrate animals including gastropods and

cephalopods.

Unconsolidated soil and rock in ridges, mounds, or hummocks Moraines

deposited by retreating glaciers.

Muck Soil consisting mostly of stable organic matter where

decomposition ceases.

Mylonite Crushed rocks that can reform and are found in areas of faulting.

National Ambient Standards established by the EPA that apply to outdoor air

Air Quality throughout the country. Primary standards are designed to protect

Standards (NAAOS) human health, with an adequate margin of safety, including

sensitive populations such as children, the elderly, and individuals

suffering from respiratory disease.

National Emissions

Emissions standards set by the EPA for an air pollutant not Standards for covered by NAAQS that may cause an increase in fatalities or in serious, irreversible, or incapacitating illness.

Hazardous Air

Pollutants Nautiloids

A large group of marine mollusks, most of which are extinct

today, except for the chambered nautilus.

New Source Pollution control standards issued by the EPA. The term is used in Performance the Clean Air Act to refer to air pollution emission standards, and Standards

in the Clean Water Act to refer to standards for discharges of

industrial wastewater to surface waters.

Nonattainment areas A locality where air pollution levels persistently exceed national

standards or contributes to ambient air quality in a nearby area

that fails to meet standards.

Oreodonts A sheep-like extinct mammal.

Organic loading The amount of organic material added to a body of water.

Orogeny Mountain building.

Ostracod A small crustacean enclosed in two hard valves, sometimes called

a "seed shrimp" because of its appearance.

Palouse Region of undulating landscape in eastern Washington and Idaho

with native short grasses, now an upland or dry-land farming area,

producing wheat and legumes.

The single continent that existed millions of years ago before it Pangea

broke up into the continents found today on Earth.

Peat Accumulation of incompletely decayed vegetation.

Pelecypods A class of animals that contains the bivalves clams, oysters, and

mussels.

Perennial Continuing to grow year after year; opposite of annual.

Perforator A tool made of stone, bone, antler, wood, or other material with a

small diameter tip of elongated shape used for perforating other

materials such as wood, hide, or other materials.

Permeability A measure of the ability of fluids to transverse the soils.

Phase I Cultural An early phase of a cultural resource documentation project

Resource involving review and summary of existing information and Investigation literature to document known cultural resources within a project

area.

Phase II Cultural

Resource

Investigation

Phase III Cultural

Resource Investigation A later phase of a cultural resource documentation and evaluation project involving a complete pedestrian survey of a project area and including an inventory of all discovered and previously

known precontact and postcontact cultural properties.

Physiographic

provinces

A landform region with common geological history creating

A later phase of a cultural resource documentation project involving a limited sample survey or inventory of a project area

similar terrain.

for cultural resources.

Piezometric surface In an unconfined aquifer, the height to which groundwater rises.

In a confined aquifer, the height to which groundwater would rise if not confined. The height of the piezometric surface indicates

the energy present in groundwater.

Placoderms Extinct armored fish that had jaws.

Plutonic rocks A type of igneous rock that forms deep beneath the earth.

PM₁₀ Particulate matter less than 10 microns in diameter. PM_{2.5} Particulate matter less than 2.5 microns in diameter.

Polyhedral core A stone core with many faces resulting from the purposeful

removal of large exterior flakes.

Populations of

concern

Any of the populations identified as minority, low income, or children that are the subject populations for consideration in an

analysis of environmental justice impacts or the protection of

children.

Precontact The general cultural period of prehistory referring to the time of

Native American groups living in an area prior to the initial

contact with Anglo-European settlers.

Postcontact The general term for describing the historic cultural period after

the time of initial contact and interaction between Native

American peoples and Anglo-European settlers.

Preform A stone shaped by flaking into a definable bifacial or unifacial

form from which finished tools can be made by further stages of

lithic reduction.

Projectile point A tool of flaked stone, bone, metal, or other material used as a

projectile, often attached to a shaft of wood, bone, or other material and used as a projectile such as a spear, dart, or arrow.

Provincial administration

An establishment of provincial or territorial government primarily engaged in activities of a governmental nature, such as legislative activities, judicial activities, taxation, public order and safety, and

the administration of provincial or territorial government

programs.

Protohistoric A general cultural time period immediately prior to or at the time

of initial contact between Native American Peoples and European settlers. A phase when the Native American cultures exhibit traits of traditional artifacts and methods mixed with European trade

goods and materials.

Pseudokarst Pseudokarst-geological formations similar to karst in

development but without carbonate bedrock.

Potential to emit

(PTE)

Potential to emit, the maximum amount of air contaminants that a source could emit if each process operated at 100 percent of its design capacity 24 hours/day, 365 days/year; materials that emit the most air contaminants are used or processed 100 percent of the time; and air pollution control equipment is turned off.

Pyroclastic Rocks (and sometimes gas) that are released through volcanic

activity.

side of a mountain rises and cools, causing precipitation to fall as rain or snow, and leaving the leeward side of the mountain or

mountain range dry.

Richter scale The measurement of earthquake magnitude.

Ring of Fire The area of the Pacific Ocean where many earthquakes and

volcanic activity occur.

Ruck march Long march with a heavy backpack on.
Scree Aggregation of loose rocks on a slope.

Seismicity/seismic Relating to earthquakes or earth vibration generally caused by

tectonic plate movements.

Shrub/Scrub As defined in the NLCD Classification Legend, areas dominated

by shrubs less than 5 meters tall, with shrub canopy typically greater than 20 percent of total vegetation. This class includes true shrubs, young trees in an early successional stage, or trees

stunted from environmental conditions.

Side-notched point A projectile point with characteristic notches in the side of the

tool's base.

Silviculture Forestry; the practice of deliberately controlling the growth,

composition, health, and quality of forests.

Soil horizons/strata A layer of soil with physical characteristics similar to those of the

soil above and below.

Spodosol An acidic soil with a sub-layer of humus typically found in cool,

humid areas such as forests.

State The state plan for complying with the Federal Clean Air Act. A

Implementation Plan SIP consists of narrative, rules, technical documentation, and

(SIP) agreements that an individual state will use to clean up areas not

meeting NAAQS.

Stemmed point A projectile point with a discernable stem at its base that has a

width dimension that is different from the blade (e.g., contracting

stem, expanding stem, or straight stem).

Strata A horizontal soil layer.

Stratigraphic Related to the study of rock layers.

Stromatoporoids Ancient organisms related to sponges that grew massive

calcareous layers, leaving obvious fossils.

Subalpine zone Zone below timberline, either in a mountainous area or to the

south of the tree line in an Arctic area.

Subduction zone Where one oceanic tectonic plate slides underneath another

tectonic plate.

Swiftwater rescue The removal of persons from threat or harm from water that is

moving faster than walking pace.

Tableland Landscape with buttes and flat-topped plateaus.

Talus A sloping mass of rocky fragments at the base of a cliff.

Taphonomic Refers to the process by which organisms become fossils.

Taxonomy Soil taxonomy is the science of classifying soils based on their

physical qualities and characteristics.

Thrust faulting

(thrusting)

Faulting that pushes one layer of rock over another, causing a

break in the earth's crust.

Till deposits Accumulations of unsorted glacial sediment.

Titanotheres An extinct group of large-hoofed mammals.

Trackway A series of fossil footprints.

Trailering Putting a horse in a trailer to travel to a destination.

Ultisol A soil that has a high acid content and low fertility, and has been

leached of minerals by the processes of weathering.

Unifacial A stone tool modified or flaked on only one edge, often used as a

scraper or cutting tool.

Vertical zonation Vegetation or "life zone" with vertical separation by altitude,

equal to vegetation and climate zonation from a change in latitude

(higher altitude zones are similar to more northerly zones).

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

Viral hemorrhagic A virus affecting fish.

septicemia (VHS)

Viewshed All the surface areas visible from an observer's viewpoint.

Viewer group Classes of viewers differentiated by their visual response to the

facility and its setting. Response is affected by viewer activity,

awareness, and values.

Viewer sensitivity The viewer's variable receptivity to the elements within the

environment they are viewing. Sensitivity is affected by viewer

activity and awareness.

Visual element A particular feature of the visual environment.

Visual impact The degree of change in visual resources and the viewer response

to those resources caused by a development project.

Visual quality Character of the landscape that generally gives visual value to a

setting.

Volcanic arc An arc of volcanoes parallel to a mountain range when viewed on

a map.

Windthrow The effect created when multiple trees in a forest are uniformly

blown down by high winds.