

## GLOSSARY

Term	EIS Definition
<b>A</b>	
A-weighted decibel (dBA)	An expression of the relative loudness of sounds in air as perceived by the human ear. In the A-weighted system, the decibel values of sounds at low frequencies are reduced compared with unweighted decibels, in which no correction is made for audio frequency. A-weighted sound levels are designated dBA rather than dB.
abiotic	Refers to non-living chemical and physical parts of the environment.
Aboriginal fishery	As defined in the <i>Fisheries Act</i> , a fishery involving harvest of fish by an Aboriginal organisation or any of its members for food, social or ceremonial purposes, or for purposes set out in a land claims agreement entered into with the Aboriginal organisation.
Aboriginal traditional knowledge	Knowledge that is held by, and unique to Aboriginal peoples. Traditional knowledge is generally acquired and accumulated by an Aboriginal community through generations of living in close contact with nature. This knowledge is both cumulative and dynamic, adapting to social, environmental, spiritual, and political change.
abrade	To scrape away or wear down by friction; to erode.
accident	With respect to the potential accidents or malfunctions of a project, a sudden event that is not planned or intended and that results in damage to life, environment or property.
accreting	Gradual increasing or building up of a landform relative to a fixed height (e.g., chart datum) as layers of material are added over time through, for example, sedimentation.
accretion rates	Rate at which layers of material are added to a landform through the deposition of sediments.
acoustic impacts	Effects related to noise.
aerial photography and LiDAR survey	A survey conducted using photographs taken from an aircraft and a remote sensing technology (Light Detection and Ranging) that measures distance by illuminating a target with a laser and analysing the reflected light.
Agricultural Land Reserve (ALR)	Lands in B.C. reserved for agricultural use pursuant to the <i>Agricultural Land Reserve Act</i> .
airborne sound-induced vibration	Vibration in a structure induced by high levels of low-frequency sound.
airshed	A part of the atmosphere that behaves in a coherent way with respect to the dispersion of emissions. May also refer to a geographic boundary for air quality standards.
allision	An event in which a moving object strikes a stationary object (e.g., a vessel hitting a pier or a moored vessel).
ambient noise	Background noise level or reference sound level.
amphibian	A cold-blooded, smooth-skinned invertebrate of the class Amphibia (e.g., a frog or a salamander), that typically hatches as an aquatic larva with gills, then transforms into an adult with air-breathing lungs.
amphipod	Small aquatic crustacean with no carapace and a laterally compressed body; often referred to as a beach hopper.

Term	EIS Definition
anadromous	Refers to an organism (e.g., Pacific salmon) that returns from the sea to freshwater to reproduce.
annual exceedance probability (AEP)	The probability, likelihood, or chance of a particular event (e.g., a storm or a storm surge) being equalled or exceeded in any given year; defined either as a number between 0 and 1 or as a corresponding percentage.
approach channel	Term used in the <i>EIS Guidelines</i> for the routes to be used by container ships for inbound and outbound movements between the RBT2 terminal and the international shipping lanes. (See also: international shipping lanes)
archaeological resources	Physical traces of material culture left behind by people in the past.
archaeological site	A place where physical remains or modification of the natural environment indicate past and traditional activities related to Aboriginal occupation. Site types include isolated artefacts, burials, shell middens, etc. (See also: Midden)
aroclors	Industrial chemicals produced from approximately 1930 to 1979 that have become widespread environmental pollutants. Many types exist. Each consists of a mixture of chlorinated biphenyls, chlorinated terphenyls, or a combination of both.
audiogram	A graphic representation of the audible threshold for standardised frequencies, as measured by test equipment (i.e., an audiometer). The Y axis represents intensity measured in decibels and the X axis represents frequency measured in Hertz.
audiogram weighting	Frequency levels measured by an audiogram are weighted to simulate the frequency response representative of 'normal' hearing.
auditory	Refers to hearing, to the sense of hearing, or to the organs of hearing.
automated stacking crane (ASC)	Equipment used to move and stack containers within a container yard and to/from the mobile equipment transfer areas or truck slots.
automatic guided vehicle (AGV)	Mobile horizontal-transfer equipment used to move containers on a terminal between the wharf area and the container yard or between the wharf area and the intermodal yard.
avoidance	In the overall context of the Project, a measure that prevents adverse environmental effects. Fisheries and Oceans Canada's (DFO's) <i>Fisheries Protection Policy Statement</i> defines avoidance as "measures to completely prevent adverse impacts to fish and fish habitat".
avulsion	Rapid abandonment of a river channel and the formation of a new river channel; in a deltaic setting, also referred to as channel switching.
<b>B</b>	
bad order	Refers to a railcar that, due to a mechanical or other problem, cannot continue in regular service until the problem has been corrected.
ballast water	Water held in a ship's ballast tank and adjusted as necessary to increase the vessel draft, change the trim, regulate the stability or maintain stress loads within acceptable limits.

Term	EIS Definition
bandwidth	Range of frequencies within a given band used to transmit a signal.
base of the Roberts Bank causeway	Refers to the foundations and fill that support the road and rail infrastructure on the existing Roberts Bank causeway. <i>(See also: eastern end of the Roberts Bank causeway)</i>
bathymetric survey	Survey undertaken to collect information about the depths and contours of underwater terrain.
B.C. Ferries Terminal	The ferry terminal and causeway operated by B.C. Ferries at Tsawwassen, B.C.
beachhead	A military term adapted for the Project to describe the initial location for creating an island to support temporary barge ramps from which the development of the containment dykes will advance.
bed material load	Portion of material (e.g., sediment) derived from the stream bed that is transported by stream flow. Typically consists of bed load and the proportion of the suspended load present in the bed sediments.
benthic	Of, relating to, or occurring at the bottom of a body of water.
berm	A constructed ridge or embankment.
berth	A designated location in a port used for mooring vessels.
berth pocket	The portion of the RBT2 dredge basin that will be dredged, soil-densified, and prepared with aggregate to form the marine area in front of the three-berth wharf structure.
bioaccumulation	The accumulation of a substance (e.g., contaminant) in the tissues of a living organism.
biodiversity	Variety of life across different levels of biological organisation. The number and relative abundance of different plant and animal species that live in an ecosystem are indicators of species diversity. Other types of biodiversity include genetic diversity and ecological diversity.
biofilm	In the context of the Project, an aggregate of microorganisms held together by a mucus-like matrix of carbohydrate that adheres to the surface of an intertidal mudflat or sand flat. Biofilm can also form on the surfaces of liquids, solids, and living tissues.
biofilm assemblage	Organisms present in a biofilm community.
biogenic habitat	Habitat created by a living organism.
biological manipulation	Management of biota or biological processes. Can refer to an offsetting measure, and in that context, would include stocking of fish or shellfish, or management/control of aquatic invasive species (e.g., hatchery, pesticide application to <i>Spartina</i> ).
biomass	A measure of productivity; the amount of living tissue either in an individual or cumulatively, in a population or an ecosystem.
biomass ratio (with/without Project)	Indicator used to quantify increase or decrease of biomass of a functional or aggregated group with the Project vs. without the Project. Calculated as the biomass 'with Project' divided by the biomass 'without Project'. For example, a ratio of less than 1 would indicate a decrease in biomass with the Project.

Term	EIS Definition
biomat	A microbial mat that can take different forms and be composed of a variety of single and multi-cellular organisms. In the context of the Project, biomat is composed of blue-green algae and associated diatoms and occurs on the ridges and mounds separated by channels that run perpendicular to the shore in the high intertidal zone of Roberts Bank.
biosedimentological zones	Zones identified based on the type of sediment (e.g., sand, mud) and type of vegetation (e.g., marsh plants, eelgrass) present in an area.
biota	Animal and plant life.
biotic	Refers to living or once living organisms.
bioturbated/bioturbation	Refers to reworking of sediments or soils by animals or plants.
blocks of railcars	During Project operation, arriving intermodal trains will be re-assembled into blocks of railcars that vary in length, each destined for RBT2 or Deltaport Terminal.
Blue list	Provincial designation for any ecological community, and indigenous species and subspecies considered to be of special concern (formerly vulnerable) in B.C. Elements are of special concern because of characteristics that make them particularly sensitive to human activities or natural events. Blue-listed elements are at risk, but are not Extirpated, Endangered or Threatened.
bollard	Structure on a dock or wharf to which vessel mooring lines are attached.
bombcart	A modified chassis pulled by a terminal tractor and used to move containers within an intermodal terminal. Bombcarts cannot be taken onto public roads and containers are not twist-lock secured to them.
bottom sets	Fine debris deposits carried out to sea by a river and forming the lowest sediment layers of its delta. Overlain by foresets. (See also: foresets; top sets).
brackish water	Water that is more saline than freshwater but less saline than seawater. In an estuary, results from the mixing of freshwater and seawater.
broadband sound	Relating to a continuous, wide range of frequencies.
broadcast spawning	An external method of reproduction, also called mass spawning or synchronous spawning, in which an aquatic female organism releases many unfertilised eggs and males release sperm to fertilise the eggs.
bunkering	Process by which a deep-sea vessel is refuelled.
by-catch	Species taken incidentally in a targeted fishery.
byssal attachment	A collection of silky filaments by which certain mollusks (e.g., mussels) attach themselves to hard substrates.
<b>C</b>	
c-weighted decibel (dBC)	'C' weighting is a standard weighting of the audible frequencies commonly used to measure Peak Sound Pressure level. Measurements show that the information is 'C' weighted decibels or, for example, as L <sub>C</sub> eq, L <sub>C</sub> Peak, L <sub>C</sub> E, etc. where the 'C' shows the use of 'C' weighting.
caissons	Prefabricated concrete hollow boxes that, in the case of the Project, will be tied together and filled with ballast rock during construction to form a foundation for the wharf.

Term	EIS Definition
caisson trench	A portion of the dredge basin that will be dredged, soil densified, and prepared with aggregate to form the foundation for the placement of the concrete caissons. This area of the dredge basin will be permanently covered by the wharf.
carapace	A bony or chitinous case or shield that covers the back or part of the back of an invertebrate animal.
carbon sink	A natural or artificial reservoir that accumulates and stores more carbon than it releases.
casualty	A vessel incident reported to a marine authority.
casualty crash	A motor vehicle accident resulting in an injury or a fatality.
catch-per-unit-effort	Catch (in numbers or weight) of fish expressed in terms of a defined unit of effort (e.g., fishing days at sea).
census designated place (CDP)	A concentration of a population identified by the United States Census Bureau for statistical purposes. CDPs are populated areas that lack a separate municipal government but otherwise physically resemble incorporated places (i.e., cities, towns).
changes in productivity	In the context of the Roberts Bank ecosystem model, the difference between the model key run results for the 10 <sup>th</sup> year of the scenarios of 'with the Project' and 'without the Project'.
chart datum (CD)	Level of water from which charted depths displayed on a nautical chart are measured. Generally derived from some phase of the tide (i.e., a tidal datum).
chlorophyll a	A type of chlorophyll that is most common and predominant in photosynthetic organisms such as higher plants, and red and green algae.
climate	A measure of the average pattern of variation in temperature, humidity, atmospheric pressure, wind, precipitation, atmospheric particle count and other meteorological variables in a given region over long periods of time.
climate forcing particulate matter	Black carbon, also expressed as CO <sub>2</sub> e, the most strongly light-absorbing component of particulate matter, formed by the incomplete combustion of fossil fuels, biofuels, and biomass.
coal particulates	Coal dust emissions.
coastal geomorphology	Study of surface and geologic processes and changes in the topographic and bathymetric features of the coastal zone.
coastal squeeze	Intertidal habitat loss that arises due to the high water mark being fixed by a dyke or other sea defence structure, and the low water mark migrating landwards in response to sea level rise.
cohort	A group of fish in a stock or population born during the same time period (e.g., year class).
cold ironing	Supply of electrical power to a vessel moored at a terminal that allows the ship's engines and associated generators to be shut down during loading and unloading, thus reducing the generation of greenhouse gases.
collision	An event in which two moving objects strike each other (e.g., two vessels in transit or manoeuvring striking each other).

Term	EIS Definition
commercial fishery	As defined in the <i>Fisheries Act</i> , a fishery in which fish are harvested under the authority of a licence for the purpose of sale, trade, or barter.
COSEWIC species database	A searchable database of wildlife species assessed by the Committee on the Status of Endangered Wildlife in Canada that provides species-specific information including: status and most recent assessment date, history of previous assessments, and a brief statement describing the reason for designation.
compensation	Replacement of natural habitat, increase in the productivity of existing habitat, or maintenance of fish production by artificial means when avoidance and mitigation measures cannot prevent <i>serious harm to fish</i> . (See also: serious harm to fish).
complementary measures	Investments in data collection and scientific research related to maintaining or enhancing the productivity of commercial, recreational or Aboriginal fisheries; can comprise up to 10% of the required amount of offsetting.
computerised automation control system (CACS)	A computer control system to be used by the Terminal Operator Concessionaire to control and monitor automated terminal equipment.
confining effect	In the densification process during marine construction, the weight of the temporary feedstock layer (about 5 m thick; also referred to as 'mattress overbuild') will hold the permanent mattress rock material in place so that, when the vibro-probe descends into the permanent mattress layer, the rock material will be less likely to be pushed away from the probe (i.e., it will be "confined").
congeners	A member of the same taxonomic genus as another plant or animal.
coning	Securing a container to a truck chassis, railcar, or another container prior to transport, using a cone-shaped twist-lock device in the container's corner casting.
conservation	Preservation, especially of the natural environment.
conservation allowances	New environmental features (such as habitat or ecosystem types) established to compensate for those that have been adversely affected or lost.
Construction Environmental Management Plan	An Environmental Management Plan that describes the control, training, mitigation, and monitoring measures to be implemented during the construction phase of a project to avoid or ameliorate potentially adverse project-related effects.
construction period	For RBT2, five and half year period in which Project construction will occur
consultation	Refers to specific periods of time during which PMV requested input on specific topics, as well as general comments on the Project. These rounds of consultation were in addition to public comment periods provided by the CEA Agency.
consumption rate	Amount of food consumed by an individual or group over a period of time, expressed as annual consumption per unit biomass (i.e., tonnes/year consumed per tonne of biomass).
containment dyke	A dyke constructed in the marine environment to contain the fill used for land development within an enclosed area. Containment dykes can be perimeter dykes or internal dykes.

Term	EIS Definition
continuous sound	Characterised by gradual changes of sound pressure levels over time (e.g., propeller noise from a transiting vessel).
contribution (of relevant fish)	As defined in DFO's <i>Fisheries Protection Policy Statement</i> , the role of the relevant fish or fish habitat in the overall productivity of a commercial, recreational, or Aboriginal fishery by a given project.
copepods	Small marine and freshwater crustaceans of the subclass Copepoda.
cope wall	A beam that is essentially a cap that ties adjacent caissons together and contains internal tunnels and surface pits to accommodate shore-to-ship services.
crab instar	Developmental stage of larval crabs that occurs between each moult until sexual maturity is reached.
creel survey	A survey of anglers or fisherpersons.
crepuscular	Active around dusk, dawn or twilight.
criteria air contaminants	A group of atmospheric pollutants that include: sulphur oxides; nitrogen oxides; particulate matter; volatile organic compounds; carbon monoxide; and, ammonia.
critical habitat	Habitat that is identified in a recovery strategy issued pursuant to the <i>Species at Risk Act</i>
crustaceans	Marine organisms in the Phylum Arthropoda and Subphylum Crustacea (e.g., crabs, lobsters, barnacles, shrimp).
cumulative effects	Residual environmental effects likely to result from a designated project in combination with the effects of other certain and reasonably foreseeable projects and activities.
cumulative effects assessment area	A regional assessment area in which cumulative interactions are explored.
current use	In relation to Aboriginal groups, the current use of lands and resources for traditional purposes, per subsection 5(1) (c) of <i>CEAA 2012</i> .
cyanobacterial (mat community)	Blue-green algal mat community.
<b>D</b>	
Data Deficient	A category that COSEWIC applies when the available information is insufficient (a) to resolve a wildlife species' eligibility for assessment or (b) to permit an assessment of the wildlife species' risk of extinction. (See also: COSEWIC).
day/night equivalent level (L <sub>dn</sub> )	The equivalent sound level (Leq) calculated after increasing the nighttime noise levels by 10 decibels to account for greater sensitivities to noise during the hours from 10:00 p.m. to 7:00 a.m.
daytime equivalent level (L <sub>d</sub> )	Equivalent sound level (Leq) measured throughout daytime hours (i.e., 7:00 a.m. to 10:00 p.m.)
Day/Night Rating Level (LR <sub>dn</sub> )	Results from adjustments made to the L <sub>dn</sub> to account for the characteristics of certain sounds (e.g., tonal qualities). Such adjustments are referred to as normalising factors.
deadweight tonnage (DWT)	A measure of how much weight a ship is carrying or can safely carry; the sum of the weights of cargo, fuel, freshwater, ballast water, provisions, and passengers.
decibel (dB)	Measurement of sound made on a logarithmic scale.

Term	EIS Definition
de-coning	The opposite of coning (i.e., the process of unlocking stacked containers from each other).
degradation	Change in a landform, usually reduction in height relative to a fixed elevation such as chart datum, due to erosion.
delta	An alluvial deposit at the mouth of a river.
delta foreslope	Distributary front deposits of a delta, mainly consisting of interlayered sand and silt. In the Fraser River estuary, slope angles of the delta foreslope vary from 23° at the head of the slope to 1° to 2° within 2 km beyond the tidal flats.
delta front	The sloping portion of a delta, developed offshore from the bar at the river mouth. Delta fronts are the site of active, and often rapid, sedimentation and are frequently characterised by growth faulting and slump structures generated by over-steepening of the sediment pile.
Deltaport Terminal	Existing container terminal at Roberts Bank.
demersal	Refers to an organism that lives near the bottom of a body of water.
demersal fish	Fish that live and feed on or near the bottom of a waterbody for all or a substantial portion of their lives.
demersal habitat	Habitat located near or on the bottom of a waterbody.
dendritic channel	A type of branching tidal channel produced when a stream receives several tributaries which in turn are fed by smaller tributaries. Branching occurs randomly in all directions and at almost any angle, resembling in plan the branching habit of certain trees.
density-dependent	When a population is regulated by its size (or density).
deposition	Process by which sediment being carried by water or wind settles out and is deposited in a new location.
designated storm	A storm, in any given year, of such a magnitude as to equal a storm having the designated annual exceedance probability.
detrital food chain	In most food chains (or food webs), energy flows from producers to consumers and finally to decomposers, which recycle nutrients back to the producers. In a detrital food web, by contrast, the energy from producers flows directly to decomposers, which in turn furnish food and energy for consumers.
Dichlorodiphenyltrichloroethane (DDT)	A colorless, crystalline, tasteless and almost odorless organochloride known for its insecticidal properties and widely used in agriculture in Canada and the U.S. until the mid1970s.
diel	Of or relating to a 24-hour period, usually including a day and the adjoining night, as of the physiology or behaviour of an organism.
direct mortality and physical injury	Death and physical harm
discharge	Outflow; a measure of the rate at which a volume of water or other liquid passes a given point and enters the receiving environment.
disposal at sea (DAS)	Ocean disposal of materials or wastes as per requirements set out in the <i>Canadian Environmental Protection Act, 1999</i> .
dissolved oxygen	The concentration of oxygen dissolved in water, expressed in mg/l or as percent saturation, where saturation is the maximum amount of oxygen that can theoretically be dissolved in water at a given altitude and temperature.



Term	EIS Definition
distributed power units (DPUs)	Locomotives placed at the middle or end of a train and remotely controlled from the leading locomotive. DPUs (or helper engines) are used with long trains, or trains carrying excess weight.
downwarping	A term used in geology to describe the movement of the crustal segment of the earth that bends downward.
DPU/Bad Order Setout Yard	A six-track rail yard on the Project's widened causeway to be used to set out DPU locomotives until they are required for an outbound train; will also be used to provide storage tracks for rail cars that have been identified as bad order and are not suitable for regular train service until repaired. (See also: bad order)
drayage	A term used in the shipping and logistics industries to describe the short distance movement of goods, usually by truck, with origin and destination in the same urban area.
dredgeate	Material removed from the bed of a water body during dredging.
dredge basin	The dredge area footprint in front of the RBT2 terminal perimeter dyke to be dredged, soil densified, and prepared with aggregate to form the berth pocket, marine approaches, and caisson trench foundation.
dredging	An excavation activity conducted at least partially underwater for the purpose of removing bottom sediments.
<b>E</b>	
eastern end of the Roberts Bank causeway	Refers to the point where the Roberts Bank causeway joins the shoreline at Roberts Bank. (See also: base of the Roberts Bank causeway)
ecosystem	A dynamic, interdependent complex of plant, animal, and microorganism communities, climatic factors and physiography, and interacting as a functional unit.
ecosystem productivity	A measure of the amount of plant and animal biological material (or biomass) produced within an ecosystem over a given amount of time (e.g., tonnes per year).
ecotrophic efficiency	The proportion of total production utilised in the ecosystem (i.e., passed up the food web to higher trophic levels, used for biomass accumulation, migration, or export).
electric stacking crane	Term used in the <i>EIS Guidelines</i> to refer to the automated stacking crane. (See also: automated stacking crane).
element	Term used by the BC Conservation Data Centre to describe a species or ecological community.
elevated total suspended sediment (TSS) levels	Increase above background levels of non-filterable residue suspended in water column
encounter	In reference to vessel traffic, an event in which the projected paths of two ships cross within a certain distance of each other.
endangered	A species facing imminent extirpation or extinction.
engagement	In the context of local government and the public, refers to ongoing information exchange, primarily through meetings, responding to public enquiries, as well as information disclosure using various print and online methods.

Term	EIS Definition
enhancement	The release of fish to augment the public resource. Can be accomplished through fish culture techniques or the introduction or transfer of wild fish.
ensonify	To fill the ocean or any fluid medium with acoustic radiation to study the medium or to locate or image objects within it.
environmental assessment (EA)	As defined in <i>CEAA 2012</i> , an assessment of the environmental effects of a designated project that is conducted in accordance with this Act. An EA predicts the environmental effects of a designated project, identifies mitigation measures, assesses whether the designated project is likely to cause significant adverse environmental effects taking into account identified mitigation measures, and ensures a follow-up program is designated to verify the accuracy of the EA of the designated project and effectiveness of any mitigation measures.
Environmental Impact Statement (EIS)	A detailed technical document prepared by the proponent of a designated project to be assessed pursuant to <i>CEAA 2012</i> . The EIS identifies the potential adverse environmental effects of a designated project including cumulative effects, measures to mitigate those effects, and an evaluation of whether the designated project is likely to cause any significant adverse environmental effects.
Environmental Management Plan (EMP)	The control, training, and management measures to be implemented during the design, construction, and operations phases of a project to avoid, minimise, or ameliorate potentially adverse effects identified during an EA.
entrainment	The incidental trapping of fish or other aquatic organisms in moving water.
epibenthic	Life habit in which an organism (plant or animal) lives on bottom substrates or the surface of submerged substrates
epibenthic algae	Photosynthetic organisms living on bottom substrates or the surface of submerged substrates.
epifauna	Animals living on bottom substrates or the surface of submerged substrates.
epifaunal omnivore	Benthic animal that lives on bottom substrates and consumes both animals and plants.
epipelagic	Growth habit of living or feeding in surface waters or at middle depths.
epipelic	Growth habit of living on the surface of sediments, living at the sediment /water interface.
epipsammic	Growth habit of living attached to sand grains or moving through sand.
Equivalent Sound Level (Leq)	Commonly used to indicate the average sound level over a period of time. Represents the steady level of sound that would contain the same amount of sound energy as the actual time-varying sound level. Although an average, it is strongly influenced by the loudest events occurring during the measured time period because these loudest events contain most of the sound energy.
erosion	Geological process in which a landform is worn down by physical forces such as running water, wind, glaciers and waves.
escapement	Number of fish that have escaped the fisheries and are available for spawning.

Term	EIS Definition
estuarine plume	Flow of low-salinity water extending from a river into an ocean, forming a distinct layer of water on top of the marine water due to its lower density.
euryhaline	Able to adapt to a wide range of salinities.
eustatic change	A uniformly global change in sea level that may be due to a change in the quantity of water in the ocean or a change in the shape and capacity of an ocean basin.
eutrophication	Process by which an aquatic ecosystem becomes enriched in nutrients, resulting in enhanced primary productivity and excessive growth of aquatic vegetation, phytoplankton or algae. As these plants die and decompose, they deplete oxygen in the water, which in turn affects ecosystem health and stability.
eutrophic event	An environmentally adverse perturbation caused by an excess rate of supply of organic matter, including primary production.
existing visual condition (EVC)	Current state of visual quality relative to the degree of deviation from the natural-appearing landscape.
extinct	A species that no longer exists.
extirpated	Species that no longer exist in the wild in a particular jurisdiction (e.g., Canada, B.C.) but do occur elsewhere (e.g., in captivity or in the wild in another jurisdiction). In B.C., this term may also be applied to ecological communities.
extracellular polymeric substances (EPS)	Molecules with a range of sizes, compositions, and chemical properties that are produced and secreted by bacteria and other microorganisms, contribute to cell adaptability and resiliency, and have functional roles in the environment. Biofilms consist of attached microbial cells within an EPS matrix.
<b>F</b>	
fallout	A layer of silty soil that will be generated by the vibro-replacement process during RBT2 marine construction and that will settle out on the sacrificial rock cap layer.
far field	Refers to a tsunami wave or waves, generated beyond the Canadian continental shelf.
fauna	Animals.
fecundity	Potential reproductive capacity of an organism (e.g., the number of eggs a fish produces during each reproductive cycle).
finfish	A true fish with fins, as distinguished from other aquatic organisms such as shellfish or jelly fish.
fish	As defined in the <i>Fisheries Act</i> , includes fish, shellfish, crustaceans, marine animals, any parts of those animals, as well as their eggs, sperm, spawn, larvae, spat, and juvenile stages.
fish habitat	As defined in the <i>Fisheries Act</i> , spawning grounds and any other areas, including nursery, rearing, food supply, and migration areas, on which fish depend directly or indirectly for their life processes.

Term	EIS Definition
fishery	As defined in the <i>Fisheries Act</i> , includes the area, locality, place, or station where a pound, seine, net, weir, or other fishing appliance is used, set, placed, or located, and the area, tract or stretch of water in or from which fish may be taken by the said pound, seine, net, weir or other fishing appliance, and also the pound, seine, net, weir, or other fishing appliance used in connection therewith.
fisheries productivity	The sustained yield of all component fish populations and species, and their habitat that support and contribute to a fishery in a specified fishing area.
fishing	The activity of catching, or attempting to catch fish by any method, either for food or as a sport.
fish that are part of (a commercial, recreational or Aboriginal fishery)	As defined in DFO's <i>Fisheries Protection Policy Statement</i> , fish that may be fished as part of a commercial, recreational, or Aboriginal fishery.
fish that support (a commercial, recreational or Aboriginal fishery)	As defined in DFO's <i>Fisheries Protection Policy Statement</i> , fish that contribute to the productivity of a commercial, recreational, or Aboriginal fishery.
flatfish	Any marine spiny-finned fish of the order Heterosomata, including halibut, plaice, turbot, and sole, all of which (when adult) swim along the sea bed on one side of the body, which is highly compressed and has both eyes on the uppermost side.
flora	Plants.
fluvial	Of, or relating to, a river or riverine environment.
focal species	Species that are considered to be ecologically linked to many components of the ecosystem, the assessment of which provides an indication of changes in productivity for similar species within the ecosystem.
food web structure	Conceptual structure that depicts the energy transfer relationships between the sun, as the inherent energy source, and producers, consumers, and decomposers.
forage fish	Small schooling fish that feed on plankton and occupy an important place in marine food webs. Forage fish species typically feed on plankton and are consumed by larger predators that are higher in the food web.
foresets	Sediment deposits carried out to sea by a river and associated with the steeper slopes of the delta front. Foresets overlay bottom sets. (See also: bottom sets; top sets).
foundering	An event in which a vessel sinks, springs leaks, or breaks in two.
Fraser River delta	Land formed during the last 10,000 years by the continuous deposition of Fraser River sediments as it merges with the marine, tidal waters of the Strait of Georgia. The delta includes lands protected by dykes, intertidal areas, and the submarine delta slope.
Fraser River estuary	Aquatic ecosystem located along the lower Fraser River from New Westminster downstream, including Roberts Bank, Sturgeon Bank and Boundary Bay, influenced by a combination of freshwater flows and marine tides.

Term	EIS Definition
frequencies	The rates at which vibration occurs that constitutes waves, either in a material (as in sound waves), or in an electromagnetic field (as in radio waves and light), usually measured per second.
freshet	River flow fed by snow and ice melt that occurs in a river catchment during spring thaw.
fry	A young fish at the post-larval stage.
fucoxanthin	A carotenoid pigment of certain brown algae and bacteria present in chlorophyll <i>c</i> .
fully reversible	Refers to a residual effect that may be fully reversed once the physical work or activity causing the disturbance ceases, allowing the valued component to return to its pre-effect condition or functionality.
functional group	Species or collections of species that share similar life history traits and ecological function(s); a modelling unit that can consist of a group with similar ecological characteristics, species, or life stages.
functional ecosystem	Complex of communities in which biota are explicitly linked to their physical surroundings and ecological cycles and pathways of energy in combination are more important than size or scale in delineating the ecosystem. (See also: ecosystem).
<b>G</b>	
genetic structure	Refers to any pattern in the genetic makeup of individuals within a population.
geomorphic	Relating to the form of the landscape and other natural features of the earth's surface.
geomorphology	The study of the physical features of the earth's surface, specifically landforms and landform processes, origins and composition, and predictions about future form and behaviour.
geotechnical	Relating to the form, arrangement, and structure of geology.
gravid	Carrying eggs or developing young.
graving dock	Also referred to as "dry dock"; used for the construction, maintenance, and repair of ships, boats, other watercraft, and marine structure components such as caissons.
gravitational acceleration	Acceleration on an object caused by force of gravity.
greenhouse gas	A gas that has an effect on the radioactive absorptivity of the earth's atmosphere and the atmosphere's temperature (e.g., carbon dioxide).
ground-borne vibration	Occurs as cyclical movement of the ground and is normally induced by repetitive energy generated at one or more sources that are directly coupled to the ground. The magnitude of the movement inside properties varies depending on factors such as distance from the source.
ground subsidence	See: <i>subsidence, isostatic subsidence or rise</i>
grounding	An event involving unintentional contact between a vessel hull and the seabed.
guild	Any group of species (e.g., birds) that exploit the same resources, often in related ways.

Term	EIS Definition
<b>H</b>	
habitat	Place where plants and animals live and find the food, water, light, shelter, living space, and other essentials that they need to survive.
habitat availability	The accessibility and procurability of the physical and biological components of a habitat to organisms.
habitat quality	Fitness potential or value of a defined habitat.
habitat restoration and enhancement	Includes physical manipulation of existing habitat function and productivity. This type of offsetting measure is generally focused in areas where habitat conditions are considered poor or degraded as such areas provide opportunity for the most benefit.
habitat suitability	Ability of the habitat in its current condition to provide the life requisites of a species.
harbour basin and berth areas	Term used in the <i>EIS Guidelines</i> to refer to the berth pocket and marine approaches of the RBT2 marine terminal.
harpacticoid copepod	An order of copepods, distinguished from other copepods by the presence of only a very short pair of first antennae. Important constituent of marine food webs. (See also: copepod)
Health Effects Institute (HEI)	A non-profit U.S. corporation chartered in 1980 as an independent research organisation.
hectare (ha)	100 x 100 m; 0.01 km <sup>2</sup> ; grid cell size for the Roberts Bank spatial model.
herbivorous copepods	Phytoplankton-feeding copepods. (See also: copepod)
heritage	Pursuant to <i>CEAA 2012</i> , refers to physical and cultural heritage. An inclusive term associated with important aspects of human history and culture; can encompass various social, economic, political, environmental, scientific, natural and cultural dimensions. (See: <i>Technical Guidance for Assessing Physical and Cultural Heritage or any Structure, Site or Thing that is of Historical, Archeological, Paleontological or Architectural Significance under the Canadian Environmental Assessment Act, 2012</i> for further information related to the term 'heritage').
herring geographical bulletin	Bulletin that records the location of Pacific herring spawning beds and associated catch, life cycle and migration information in coastal B.C.
hostler	Tractor unit used to move bombcarts and chassis within a marine terminal yard. (See also: bombcarts)
hydrodynamic model	A tool used to represent, describe or predict the motion of water.
hydrodynamics	Branch of physics that investigates the motion of fluids and fluid forces acting on solid bodies.
hydrophobic compound	A molecule that lacks affinity for water or is insoluble in water.
hypsometric analysis	Analysis that describes the distribution of elevations across a given area of land surface; an important tool in the assessment and comparison of the geomorphic evolution of various landforms.
hypsometry	Measurement of land elevation relative to sea level.

Term	EIS Definition
<b>I</b>	
ichthyoplankton	Eggs and larvae of fish drifting in the water column.
illuminance	Amount of light energy reaching a given point on a defined surface area, namely luminous flux (i.e., lumens) per square metre.
impact piling	Method used to drive piles (poles) into the ground to provide foundation support for buildings or other structures. Typically involves the use of a hydraulic hammer or a vibratory pile driver.
impulsive sounds	Sounds with short durations (less than a few seconds) (e.g., pile-driving); includes frequencies over a large portion of the acoustic spectrum. These sounds are typically characterised by abrupt increases of sound pressure (less than a second), followed by rapid decay back to pre-existing levels (within a few seconds).
incident	With respect to the potential accidents or malfunctions of a project, an undesired event with the potential to result in harm to people, damage to the environment or property, and/or disruption of process.
indirect effects	In an economic context, changes in sales, income, or employment within the economy related to industries supplying goods and services for a project.
Individual performance	A component of fish productivity; refers to body condition, parasite burdens, stress, disease, or other factors that affect individual fitness.
industrial water	Term used in the <i>EIS Guidelines</i> to describe process water, used within industries, which is normally chemically treated for the purposes of the particular industrial process (e.g., boiler feed water). This is not applicable to a container terminal such as RBT2 where potable water is used for any terminal water needs.
infauna	Aquatic animals that live in the substrate of a body of water.
infaunal invertebrate	Aquatic invertebrate organism that lives within the soft substrates of a water body.
infilling	In the context of construction, the act of using material to fill in space between structural members.
infrastructure developer	Entity contracted to construct and develop Project infrastructure.
in situ	Refers to something in a particular location.
insoluble	Incapable of being dissolved.
inter-causeway area	Area of intertidal and subtidal habitat on Roberts Bank located between the B.C. Ferries Terminal and causeway and the Roberts Bank terminals and causeway.
intermediate transfer pit (ITP)	A temporary underwater sand storage site located in the inter-causeway area, just east of the existing Roberts Bank terminals. Although referred to as a “pit”, the ITP is actually an underwater storage pile with a footprint of approximately 33 ha and sufficient capacity for storage of approximately 2.4 million m <sup>3</sup> of sand. Currently inactive, the ITP was most recently used for temporary sand storage during development of the Deltaport Third Berth Project.
intermodal	Relating to transportation of goods by more than one means of conveyance, as by truck and rail.
intermodal yard (IY)	Facility/area capable of handling and transferring cargo between terminal, rail, and road modes of transportation.

Term	EIS Definition
internal dyke	Generally a construction containment dyke used to divide larger areas into smaller fill areas for scheduling or material availability reasons. An internal dyke is not usually armoured.
international shipping lanes	Deep-water route within which commercial vessels may arrive from either ocean transit or the Puget Sound area and travel toward the Greater Vancouver area. Ships approaching the RBT2 terminal will leave these shipping lanes in the vicinity of the Canada/U.S.A. border. (See also: <b>Figure 4-26 Container Ship and Tug Support Key Locations Map</b> ).
intertidal	Area that is above water at low tide and under water at high tide.
intrinsic rate (of population growth)	Rate at which a population increases in size in the absence of any density-dependent forces regulating the population.
inverse distance weighting (IDW) procedure	One of the most commonly used techniques for interpolation of scatter points. These methods are based on the assumption that the interpolating surface should be influenced most by the nearby points and less by the more distant points. The interpolating surface is a weighted average of the scatter points and the weight assigned to each scatter point diminishes as the distance from the interpolation point to the scatter point increases.
invertebrate	Animal without a backbone.
irreversible	Refers to a permanent residual effect (i.e., an effect that cannot be reversed even when the physical work or activity causing the disturbance ceases).
isostatic	Local change in sea level that occurs due to an increase or decrease in the height of the land. When the height of the land increases, sea level falls; when the height of the land decreases, sea level rises.
isostatic subsidence or rise	Condition in which the land sinks or rises relative to a stationary sea level.
<b>K</b>	
knot	A unit of speed equal to one nautical mile (1.852 km) per hour; equivalent to approximately 1.151 miles per hour.
<b>L</b>	
landscape unit	A reference unit (usually of area), composed of multiple habitats, that can be measured, mapped, or described.
land spill	An unplanned, unintended or unauthorised release of a product or material that occurs on land.
land subsidence	See: <i>subsidence, isostatic subsidence or rise</i>
lead track	Railway track that leads from a mainline track to a yard track. From the lead track, railcars proceed through a series of switches into the yard.
levelling course	A layer (5 cm) of crushed rock that will be added to form a level area for the placement of the caissons during construction of the RBT2 marine terminal.
Light Detection and Ranging LiDAR	A remote sensing method that uses light in the form of a pulsed laser to measure ranges (variable distances) to the Earth. These light pulses —combined with other data recorded by the airborne system — generate precise, three-dimensional information about the shape of the earth and its surface characteristics.



Term	EIS Definition
life history stage	Developmental stage (e.g., egg, larvae, juvenile, adult).
light spill	Light that falls beyond the intended object of illumination.
light trespass	Amount of light or illuminance that strays from its intended purpose onto neighbouring areas.
limit reference point	Threshold below which productivity is considered to be severely impaired. May either correspond to a minimum condition (e.g., very low spawning biomass) or a maximum condition (e.g., high rate of decline in stock size, high mortality rate), at which point a management response is automatically triggered.
limiting magnitude star	The faintest star that can be seen with the naked eye by an average observer.
liquefaction	A phenomenon in which the strength and stiffness of a soil is reduced by earthquake shaking or other rapid loading.
littoral	Living in or related to the marine intertidal zone, delimited by low and high water tide marks.
Local Assessment Area (LAA)	Area that includes and surrounds the Project area within which potential project effects on a valued component are expected to occur. Encompasses the zone of influence of the project, including areas that may be affected by project effects (e.g., air contaminants, noise, light).
logarithmic scale	A nonlinear scale of measurement that uses the logarithm of a physical quantity rather than the quantity itself. Common uses include earthquake strength, sound loudness, and light intensity.
long-term warming	A trend for a region over a relatively long period of time that indicates an increase in air or water temperatures.
loudness	The attribute of a sound that determines the magnitude of the auditory sensation produced; primarily depends on the amplitude of the sound wave involved.
lower delta plain	Deltas typically consist of three components. The most landward section is called the upper delta plain, while the middle one, occasionally covered by tidal water, is the lower delta plain. The boundary between the upper delta plain and the lower delta plain is determined by the maximum tidal elevation.
low-frequency noise	The frequency range from about 10 Hertz (Hz) to 200Hz; recognised as a special environmental noise problem.
low-lying biofilm zones	Low-lying zones that support biofilm, located adjacent to the ridge and runnel complexes that exist in upper intertidal area of Roberts Bank. (See also: ridge and runnel complexes).
lumens	Luminous output.
lux	A unit of illumination equal to the direct illumination on a surface that is everywhere 1 m from a uniform point source of one candle intensity or equal to one lumen per square meter.
<b>M</b>	
macroalgae	Multicellular aquatic photosynthetic organisms, large enough to be seen without the aid of microscope.
macrofauna	Infaunal and epifaunal invertebrates ranging in size from 500 µm to 1 mm. (See also: infaunal; epifaunal).

Term	EIS Definition
macroinvertebrate	An invertebrate that is large enough to be seen without the aid of microscope.
macrophyte	A photosynthetic organism, large enough to be seen without the aid of microscope, that grows permanently or periodically submerged below, emerging above, or floating on the water surface.
macroscale	A relatively large scale.
magnitude	Refers to the expected size or severity of a residual effect.
mainline track	A railway track that can support train operations at full speed and weight. Mainline track begins or ends at yard limits.
malfunction	With respect to the potential accidents or malfunctions of a project, a performance failure that prevents machinery or equipment from functioning in a normal or satisfactory manner.
mammal	Any of various warm-blooded vertebrate animals of the class Mammalia, including humans, characterised by a covering of hair on the skin and, in the female, milk-producing mammary glands for nourishing the young.
marine approach areas	The angled areas located off of the west and east ends of the berth pocket, required for safe navigation of container ships arriving to, and departing from the RBT2 marine terminal.
marine fender	A bumper used to absorb the kinetic energy of a ship berthing against the berth face of a wharf structure that prevents damage to the moored ship and the wharf.
marine fish	Fish that live in saltwater for all or part of their lives.
marine sediments	Unconsolidated deposit of organic and inorganic particles that accumulate on the seabed.
marine spill	An unplanned, unintended or unauthorised release of a product or material into the marine environment.
mattress rock	During RBT2 marine construction, a densified layer of rock that will be placed on the dredged seabed to act as a rock foundation (mattress) for upper layers of scour protection rock, levelling course gravel, and the like.
maturity	A life stage at which an organism is able to reproduce.
maximum sound level (L <sub>max</sub> )	Maximum a-weighted sound level, in dBA, for a given noise event.
mean	Average of a range of values, determined by adding up all the values and dividing by the total number of the values.
meiofauna	Infaunal and epifaunal invertebrates ranging in size from 63 µm to 500 µm. (See also: infaunal; epifaunal)
merganser	Any of various fish-eating diving ducks of the genus <i>Mergus</i> or related genera, having a slim-hooked bill.
mesoscale	An intermediate scale.
metalloids	Chemical elements with properties in between those of metals and non-metals. The 6 commonly recognized metalloids are boron, silicon, germanium, arsenic, antimony and tellurium.
metamorphosis	Transformation of a larval organism into a juvenile or adult.

Term	EIS Definition
microfauna	A small, often microscopic animal.
microphytobenthos	Microscopic, unicellular algae that live on bottom substrates or the surface of submerged substrates.
midden	A mound or deposit containing shells, animal bones, and other refuse that indicates the site of a former human settlement.
mill rate	Amount of tax payable per dollar of the assessed value of a property.
mitigation measures	As defined in <i>CEAA 2012</i> , measures for the elimination, reduction, or control of the adverse environmental effects of a designated project, including restitution for any damage to the environment caused by those effects through replacement, restoration, compensation, or any other means.
mobile horizontal transfer equipment	Mechanical equipment used to move containers between container terminal areas via paved roadways. The equipment can be manually or automatically driven depending on the type of equipment selected by the terminal operator.
monitoring	Process and activities used to characterise, oversee, and evaluate the progress, effects, and compliance of a physical activity with respect to EA predictions and/or prescribed environmental management practices and regulatory requirements.
Monte Carlo (MC)	Computational simulation method that relies on repeated random sampling to obtain numerical results.
mooring	The process by which a ship is positioned into place at its berth and secured to a wharf using mooring lines between the ship and the bollards on the wharf.
mooring bollard	A short vertical post on a wharf, or mooring dolphin platform, used for securing mooring lines from ships.
mooring dolphin	A piled marine structure with a mooring bollard for securing mooring lines from the ship.
morphodynamic	Landscape changes due to erosion and sedimentation.
morphology	Biological study of the form and structure of living things.
morphometric analysis	Quantitative description and analysis of landforms as practiced in geomorphology that may be applied to a particular kind of landform or to drainage basins and large regions.
<b>N</b>	
native vegetation	Plant that originated in (i.e., is indigenous to) a particular area.
neap tide	A tide of minimum range that occurs twice a month at the first and the third quarters of the moon.
nepheloid layer	Layer of water in the deep ocean, above the sea bed, that contains significant amounts of suspended sediment.
nighttime equivalent level (L <sub>n</sub> )	Equivalent sound level (Leq) measured throughout the night time (i.e., 10:00 p.m. to 7:00 a.m.).
nighttime glare	Light entering the eye directly from luminaires or indirectly from reflective surfaces that causes visual discomfort or reduced visibility.
noise	A sound, especially one that is loud or unpleasant or that causes disturbance.

Term	EIS Definition
No Status	Species that are not of conservation concern (i.e., not considered sensitive to human activities or natural events, and not at risk, threatened, or endangered).
non-auditory	Physiological effects of exposure to intense sounds that are not hearing related (e.g., quick changes in ambient pressure induced by impulsive noise).
non-impulsive (or continuous)	High intensity, short duration sound (e.g., less than a few seconds), generated from activities such as impact pile driving.
non-indigenous	Plant or animal that did not originate in a particular area; introduced species.
non-polar	A molecule with no permanent separation of charge (i.e., no positive or negative poles).
Not at Risk	A COSEWIC term that refers to a species that has been evaluated by COSEWIC and found to be not at risk of extinction, given current circumstances.
nudibranchs	Soft-bodied marine gastropod mollusk of the Order Nudibranchia.
<b>O</b>	
obtrusive lighting	Light that spills beyond the intended illuminated area and hinders or bothers the human eye.
ocean-type chinook salmon	Behavioural form of chinook salmon that migrates to sea during first year of life.
occlusion	Inclusion or sorption of gas trapped during solidification of a material.
Offsetting	As defined in DFO's <i>Fisheries Protection Policy Statement</i> , measures to counterbalance serious harm to fish by maintaining or improving fisheries productivity after all feasible measures to avoid and mitigate impacts have been undertaken. Offset measures should support available fisheries management objectives and local restoration priorities.
Offsetting Plan	As defined in the <i>Fisheries Protection Policy Statement</i> , a plan that describes the measures and standards to be applied to first avoid, then mitigate, and finally offset any residual <i>serious harm to fish</i> that is part of or that supports commercial, recreational or Aboriginal fisheries. (See also: serious harm to fish).
one-third octave bands	A frequency band in which the upper band-edge frequency (f2) is the lower band frequency (f1) times the cube root of two.
ongoing productivity	As defined in DFO's <i>Fisheries Protection Policy Statement</i> , the potential sustained yield of all fish populations and their habitats that are part of or support commercial, recreational and Aboriginal fisheries.
ontogenetic diet shift	A change in fish diet from small to larger prey items in response to an increase in fish body and gape dimensions.
Operation Environmental Management Plan	An Environmental Management Plan that describes the control, training, mitigation, and monitoring measures to be implemented during the operation phase of a project to avoid or ameliorate potentially adverse project-related effects.
operation phase	Period in which the RBT2 marine terminal will be in operation.

Term	EIS Definition
orange sea pen	A species of colonial marine cnidarian belonging to the order Pennatulacea. Sea pens consist of multiple polyps that are specialised for specific functions (i.e., support, feeding, and reproduction). While generally sessile (i.e., anchored in sandy or muddy substrates by a root-like peduncle), they are capable of re-locating and re-anchoring.
osmoregulatory	Relating to the physiological process that a living organism uses to maintain water balance (i.e., compensate for water loss, avoid excess water gain, and maintain an appropriate osmotic concentration of body fluids).
out of trim	Trim is defined as the difference between a vessel's draught forward and draught aft. A ship may be out of trim due to unbalanced loading or shifting of cargo. When a ship is out of trim, its under keel clearance may be less than that calculated using the normal maximum draught of the vessel.
oxidation reduction potential (ORP)	A measurement of water's ability to oxidise contaminants. The higher the ORP, the greater the number of oxidising agents (also known as redox potential).
<b>P</b>	
Pacific Flyway	A major north-south flyway for migratory birds that extends from the North Slope of Alaska to Central and South America.
Pacific salmon	Refers to five salmonid species found in B.C. and the Yukon: pink ( <i>O. gorbuscha</i> ), chum ( <i>O. keta</i> ), coho ( <i>O. kisutch</i> ), sockeye ( <i>Oncorhynchus nerka</i> ), and chinook ( <i>O. tshawytscha</i> ). These species form part of the larger classification of Pacific salmonids, which includes steelhead and cutthroat trout.
paleontological	Of or relating to paleontology, which is the study of the forms of life existing in prehistoric or geologic times, as represented by the fossils of plants, animals, and other organisms.
paleoseismology	Study of the timing, location, and size of prehistoric earthquakes based on the interpretation of the geological record.
partially reversible	Refers to a residual effect that may be partially reversed once the physical work or activity causing the disturbance ceases, allowing the valued component to partially revert to its pre-effect condition or functionality.
particle velocities	Speed or velocity of particles during displacement from their random motion in the presence of a sound wave.
particulate	Small particles, usually in suspension.
passerines	Birds of the Order Passeriformes which includes perching birds and songbirds such as jays, blackbirds, finches, warblers, and sparrows.
peak ground acceleration (PGA)	Maximum acceleration measured by instruments such as accelerographs; a measure of earthquake acceleration on the ground.
peak sound pressure level	Maximum sound pressure level in a frequency band attained by an acoustic pressure signal (also referred to as zero-to-peak). At high sound pressures, the peak sound pressure level can be a criterion for assessing whether a sound could cause injury.
pedigree	Indicator for how well-rooted a model is in local data.
pelagic	Of or relating to open water.

Term	EIS Definition
perimeter dyke	A containment dyke positioned at the perimeter of a land development area (e.g., RBT2 marine terminal).
pH	A measure of the acidity or alkalinity of a solution. The pH scale ranges from 0 to 14. Solutions with a pH of less than 7 are acidic, and those with a pH greater than 7 are basic (or alkaline). Distilled water is neutral and has a pH of 7.
phytoplankton	Microalgae that form the base of the food web in marine and freshwater.
piles	Type of foundation using columns of concrete, steel, or timber.
pioneer community	Organisms that first colonise new habitat or habitat that has been disturbed to the extent that the previous biological community has been destroyed.
piscivorous	Fish-eating organism.
planform changes	Vertical changes in contour above a given elevation.
planimetric analysis	Analysis of measurements in a multi-dimensional plane (e.g., angles, distances).
planktivorous fish	Plankton-eating fish.
plankton	Small (often microscopic) plants and animals floating, drifting or weakly swimming in bodies of marine or freshwater.
plausible worst-case scenario	An event or series of events resulting from an accident or malfunction that, while unlikely, is possible and credible, and if it were to occur, could potentially result in significant adverse effects.
pod (with respect to RBT2 marine construction)	Land components of the Deltaport Terminal area.
pod (with respect to killer whales)	A cohesive long-term social unit consisting of a group of individuals related through matriline that travel together most of the time.
polychaetes	A class of annelid worms, generally marine. Each body segment has a pair of fleshy protrusions called parapodia that bear many bristles, called chaetae, which are made of chitin.
polychlorinated biphenyls (PCBs)	A synthetic organic chemical compound of chlorine attached to biphenyl, which is a molecule composed of two benzene rings.
polycyclic aromatic hydrocarbons (PAHs)	A group of organic compounds that contain two or more benzene rings, arranged in various configurations, in their structure. PAHs are neutral, non-polar organic molecules. Members of this class of compounds have been identified as exhibiting toxic and hazardous properties. PAHs are found in petroleum and fossil fuel emissions.
point of reception	A location where measurements or predictions of light levels are made.
Port Metro Vancouver (PMV) jurisdiction	Includes the federal lands and the lands other than federal real property that PMV manages, together with the navigable waters over which it has navigation jurisdiction.
PMV Lands	Federal real property managed by PMV and lands that PMV holds in its own name.
port-side-to	For the Project, the “port” side of the ship is moored to the wharf as opposed to the “starboard” side of the ship. When standing on the bridge of a ship looking toward the bow (ship’s front), port refers to the left side.

Term	EIS Definition
post-project hyperspectral mapping	Method to be used to identify surface area of biofilm and estimate its relative density within the LAA when Project construction is complete.
potable water	Water that is fit for consumption by humans and animals; also referred to as drinking water.
potential production	Maximum natural capability of habitats to produce healthy fish, safe for human consumption or to support or produce aquatic organisms upon which fish depend.
preloading	Placement of large amounts of fill within the footprint of a construction site to allow for subsurface compaction and settlement over a period of time.
primary production	The synthesis and storage of new organic material from inorganic molecules such as water (H <sub>2</sub> O) and carbon dioxide (CO <sub>2</sub> ) by living organisms; dominated by the process of photosynthesis which uses sunlight to synthesise organic molecules.
primary productivity	Rate at which primary producers (i.e., plants) accumulate energy.
probability	With respect to the potential accidents or malfunctions of a project, the likelihood that a particular incident or a plausible worst-case scenario, could occur.
probable effect level	The concentration of a substance above which, following exposure, an organism is expected to frequently experience adverse effects.
production	Generation of biomass in an ecosystem.
production/biomass ratio (P/B) (year <sup>-1</sup> )	Rate at which biomass is produced.
production rate (P)	Describes how quickly an organism or species grows and reproduces.
productive capacity	The maximum natural capability of a habitat to produce healthy fish, safe for human consumption, or to support or produce aquatic organisms on which fish depend.
Productive Capacity Technical Advisory Group	Group of scientific and technical experts formed to evaluate how the productive capacity of Roberts Bank can most appropriately be defined from an ecological perspective and how changes in habitat productivity as a result of RBT2 can be quantified.
ongoing productivity	Rate per unit area or per unit volume at which biomass consumable as food by other organisms is made by producers.
Project area	The land and land covered by water to be occupied by Project components. <i>See also: Table 4-1 Project Component and Sub-component Areas.</i>
property damage	Material damage to property, including but not limited to vehicles, vessels, and infrastructure.
pure train	A train that consists of railcars destined for a single terminal.
<b>Q</b>	
quiescent areas	Quiet, protected areas.

Term	EIS Definition
<b>R</b>	
racon	Radar transponder or beacon used to help navigators determine their position.
rail-mounted gantry crane (RMG)	Crane that is able to travel horizontally along rails and is used to transfer containers to and from railcars and mobile horizontal-transfer equipment. (See also: mobile horizontal transfer equipment)
Ramsar site	Wetland of international significance, recognised globally as a result of the Ramsar Convention (1971), an international treaty for the conservation and sustainable utilisation of wetlands.
raptor	Bird of prey.
reach stacker	Equipment used to pick up containers using a boom and spreader bar that extends out and connects to the container's four top corner castings. Once picked up, containers can be loaded onto railcars, bombcarts, or chassis, or placed in stacks in the container yard. (See also: bombcarts)
received level	Strength of the signal produced by a radio transmitter at a particular location, usually expressed as microvolts or millivolts per meter of effective receiving antenna height.
recreational fishery	As defined in the <i>Fisheries Act</i> , a fishery in which fish are harvested under the authority of a licence for personal use of the fish or for sport.
recruitment	The addition of new individuals to the fished component of a stock.
Red list	Provincial designation for any ecological community, and indigenous species and subspecies that is extirpated, endangered, or threatened in B.C., but do occur elsewhere. Endangered elements are facing imminent extirpation or extinction. Threatened elements are likely to become endangered if limiting factors are not reversed.
reefers	Containers that have an integral refrigeration unit for transportation of temperature sensitive cargo. The refrigeration unit requires a connection to an external source of electrical power to operate.
reef fish	Fish species that live in the vicinity of shallow, rocky reefs, including artificial reefs.
Regional Assessment Area (RAA)	A regional area that provides context for the assessment of potential project effects on a valued component. May also be used as the spatial boundary for the assessment of potential cumulative effects on the valued component.
relative value	In relation to proposed offset projects, relative values of habitat types have been determined through the application of a rating matrix that results in the identification of default conversion ratios. Site modifiers (e.g., anthropogenic factors) are applied to these default conversion ratios, where and when appropriate. The relative value approach may be replaced with a productivity approach, especially for larger offsetting sites.



Term	EIS Definition
relevant fish	All fish involved (either as part of the fishery or in a supporting role) in a commercial, recreational, or Aboriginal fishery, and that could be affected by the Project. The contribution of relevant fish relates to the role of the fish and fish habitat affected by a project in the overall productivity of the commercial, recreational, or Aboriginal fishery. (See also: Aboriginal fishery; commercial fishery; recreational fishery; contribution (of relevant fish)).
representative species	In reference to the assessment of biophysical resources, species selected to represent a particular sub-component of a valued component.
residual environmental effect	An environmental effect of a designated project that remains, or is predicted to remain, after mitigation measures have been implemented.
resilient	Characteristic of a population that is able to absorb and recover following disturbance.
responsible authority	As defined by <i>CEAA 2012</i> , the authority that is referred to in section 15 of the Act with respect to a designated project that is subject to an EA. An entity referred to as a responsible authority is required, among other things, to ensure that the EA of the designated project is conducted and a report is prepared in respect of the EA. The CEA Agency is the responsible authority for the EA of the RBT2 Project.
return period	The inverse of the expected number of occurrences in a year.
ridge and runnel complexes	An accreting sedimentary feature, present on the upper tidal flats on both sides of the Roberts Bank causeway (as well as other locations in the Fraser River delta) that appears to play an important role in modifying patterns of tidal inundation and emergence of the portions of Roberts Bank that have been identified as having the highest concentration of biofilm. On Roberts Bank, located at an elevation of +3.5 m to 4 m CD.
rip-rap	Rocks used to protect shorelines, bridge abutments, pilings, and other shoreline against scour, water, or ice erosion.
riverine plume	Flow of freshwater or low-salinity water discharged from a river beyond the bounds of the river channel.
Roberts Bank	The geological deposition of sediments to the south of Canoe Passage at the mouth of the Fraser River estuary, consisting of intertidal mudflats, marshes, and surrounding waters.
Roberts Bank causeway	The term used to refer to the existing structure, and road and rail infrastructure linking Roberts Bank terminals to the mainland.
Roberts Bank ecosystem model	The EwE (Ecopath with Ecosim) model of the Roberts Bank study area.
Roberts Bank terminals	The term used to refer collectively to the existing Deltaport Terminal and Westshore Terminals.
root-mean square	A statistical measure of the magnitude of a varying quantity.
round nematodes	Roundworms with long thread-like bodies; usually very small to microscopic. Most live in sediments or soil.
rubber-tired gantry crane (RTG)	Mobile gantry crane that travels on rubber tires. A RTG can pick up a container from a stack of up to five containers high and up to seven containers wide.

Term	EIS Definition
<b>S</b>	
S-bend	The area of the widened causeway that extends around the existing Deltaport Terminal in a reverse S shape leading to RBT2.
sacrificial rock	A layer of rock that is placed over an area requiring subsoil improvement by vibro-replacement. The rock layer acts as a cap to filter outflow of fines produced by the process and some of it will be drawn down into the native soil as replacement material.
salinity	Saltiness of water or total concentration of all dissolved salts in water.
salt wedge	Intrusion of saline, marine water upstream within a river channel. In the Fraser River, on a large flood tide, a wedge of saline water from the Strait of Georgia may extend along the bottom of the river channel as far upstream as Annacis Island (22 km from the river mouth). The salt wedge moves back downstream on the ebb tide.
screed	A process that uses mechanical waterborne equipment (marine derrick) to grade the caisson foundation rock materials to the desired elevation. Rough-screeding for mattress rock is usually done by clamshell derrick with echo-sounder for elevation control. Fine-screeding for levelling course is usually done using a heavy steel screed-bar towed by a moving derrick with manual lead-line survey for precise elevation control.
secondary effect	A change in economic activity due to subsequent rounds of re-spending in the economy; comprising indirect and induced effects.
sediment grain size composition	System to describe sediment based on the grain size of its constituent particles.
sediment grain size distribution	Analysis of sediment particle size fractions present in a sediment sample. relative to an average
sediment porewater chloride	Sediment porewater chloride refers to the concentration of chloride anions in the sediment porewater (sediment interstitial water), the water occupying the small openings, spaces, and voids between sediment particles.
sediment transfer pit	Term used in the <i>EIS Guidelines</i> to refer to the intermediate transfer pit.
seismic	Of, subject to, or caused by an earthquake or earth vibration.
semi-diurnal tide	A tidal cycle involving two high and two low tides every lunar day
serious harm to fish	As defined in the <i>Fisheries Act</i> , the death of fish or any permanent alteration to, or destruction of, fish habitat.
sessile	A characteristic of some animals, such that they are not able to move about. Sessile animals are usually permanently attached to a solid substrate of some kind, such as a part of a plant, a dead tree trunk, or a rock.
ship beam	Width of a ship at its widest point, as measured at the ship's nominal waterline.
ship call	A visit of a ship to a terminal consisting of an arrival movement and a departure movement. One ship call equals two ship movements.
ship movement	A one way movement by a ship either on arrival or departure. A ship movement is half of a ship call.
ship-to-shore gantry crane	Gantry crane able to travel horizontally on rails and used to transfer containers to and from vessels.

Term	EIS Definition
shorebird	Bird, such as sandpiper, plover, or snipe, which frequents the shores of coastal or inland waters.
shore power	Supply of electrical power to vessels moored at the berths to allow ship engines and associated generators to be shut down during loading and unloading operations, thus reducing the generation of greenhouse gases. Same meaning as the term cold ironing.
shuttle carrier	Equipment used primarily to move containers between a vessel and the container yard or intermodal yard. Shuttle carriers are the only mobile horizontal-transfer equipment that can pick up containers from the ground and leave them on the ground, allowing disconnected operations. (See also: mobile horizontal-transfer equipment)
side pick	Equipment used to move empty containers within the intermodal yard and stack them up to eight containers high. A side pick uses a bar to connect to the two nearest corner castings on top of the container.
siding track	A railway track parallel to a mainline track to allow a train on the mainline to pass the train on the siding. Trains are not usually parked on sidings; the train is active, but considered to have a holding status.
significant wave height	The mean height of the highest one-third of waves in a given seastate – approximately equal to the wave height estimated at sea by experienced observers.
silt curtain	A curtain placed around a dredge or soil disposal site to contain suspended sediments within the area of the screen.
siphon	One of the tubes or folds of the mantle border of a bivalve or gastropod mollusk by which water is conducted into the gill cavity.
site association	A group of related ecosystems that share similar physical and biological characteristics so that they support or will support similar vegetation at maturity.
site fidelity	Tendency of an organism to return to a previously occupied area or remain in a particular area over an extended period.
site-specific	Limited to local areas within and immediately adjacent to the area of activity.
sky glow	Unwanted illumination of the night sky due to the scattering and reflection of light rays radiated in directions above the horizontal or reflected from the ground and buildings by aerosols present in the night sky.
slough	A secondary channel of a river delta, usually flushed by the tidal, characterised by slow-moving water and soft bottom substrates
sonic drilling	Core drilling involving high-powered vibrations transmitted down the drill casing to a cutting shoe. The casing and the shoe vibrate into the ground and through the rock, producing an undisturbed core of unconsolidated material.
sound exposure level (SEL)	Measures the total sound energy contained in one or more pulses or acoustic events. The SEL represents the total acoustic energy received at a location during an acoustic event (i.e., the sound energy to which an organism at that location would be exposed).
sound power levels (SWLs)	Indicates the total acoustic energy that a machine, or piece of equipment, radiates to its environment.

Term	EIS Definition
sound pressure level	A ratio of the absolute, Sound Pressure and a reference level (usually the Threshold of Hearing, or the lowest intensity sound that can be heard by most people). It is measured in decibels with a Sound Pressure Level Meter.
source level	A measure of the intensity of sound that a source emits at a standard reference distance of 1 m
spawner escapement data	Information regarding the portion of a fish population that escapes fisheries and reaches freshwater spawning grounds.
spawning	Fish reproduction process characterised by females and males depositing eggs and sperm, respectively, into the water simultaneously or in succession and resulting in the fertilisation of the eggs.
spawning stock biomass	Weight of the portion of a stock that is capable of reproducing.
species of Special Concern	A species that is particularly sensitive to human activities or natural events but is not endangered or threatened. Pursuant to the <i>Species at Risk Act</i> , a wildlife species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats.
species at risk	Those indigenous species, subspecies, populations, or ecological communities identified as being vulnerable by federal or provincial regulators. An extirpated, endangered or threatened species or a species of special concern.
Species at Risk Public Registry	Federal website that provides news, information, and documents related to species at risk in Canada. The Public Registry fulfills the requirement under the <i>Species at Risk Act</i> for the Minister of the Environment to establish a public registry for the purpose of facilitating access to SARA-related documents.
species richness	The number of species represented in an ecological community, ecosystem, landscape, or region.
specific conductance	A measure of how well water can conduct an electrical current; made at or corrected to 25° C, as water temperature affects conductivity readings. Conductivity increases with increasing amount and mobility of ions.
spring tides	A tide of maximum range that occurs twice a month just after a new or full moon.
squat effect	Phenomenon resulting from the flow of water between a vessel's hull and the seabed in channels with constricted clearances, the consequence of which is a suction force making the vessel float deeper in the water with a reduction in under keel clearance.
Standard Management Practice	Effective, technically feasible, and practical method, technique, or process to achieve an outcome that is environmentally sound and that satisfies regulatory requirements.
standing stock	Weight or biomass of a stock of organisms.
standard deviation	A measure of the dispersion of a set of data from its mean. The greater the spread in the data point values, the higher the deviation.
stock	A sub-population of a particular species that shares a common gene pool, with population dynamics determined by intrinsic parameters such as growth, recruitment, mortality, and fishing mortality, and that warrants consideration as a self-perpetuating system that can be managed.

Term	EIS Definition
storage track	Railway track on which trains are stored. Stored trains usually include railcars, not locomotives. Storage tracks can also be used for train assembly.
storm surge	An abnormal rise of water generated by a storm, over and above the predicted astronomical tide.
storm winds	For the purposes of existing container terminal operations, wind speeds greater than 50 km/hr.
stream-type chinook salmon	Behavioural form of chinook salmon that spends one or more years as a juvenile in freshwater before migrating to the ocean as a smolt.
strings of railcars	Coupled railcars of a certain overall length (e.g., 500 m, 1,000 m) to be moved to specified tracks in a yard or an intermodal yard.
structural alterations	Any change in load or stress of the loaded or stressed members of a building or structure.
stuffing	Loading empty containers for export.
subduction	The process that takes place when one tectonic plate moves under another tectonic plate as the two plates converge. For example, west of Vancouver Island and extending from the north tip of Vancouver Island to northern California, the oceanic Juan de Fuca plate is moving towards North America at about 2-5 cm/year and is sliding (subducting) beneath the continent. This region is called the Cascadia subduction zone.
sub-components	A sub-grouping of a valued component used to structure the RBT2 EA.
subduction earthquake	An event that occurs when two tectonic plates converge, and one plate slides (subducts) under another plate producing seismic waves.
sublittoral	From the lower edge of the intertidal zone to the outer edge of the continental shelf down to a depth of -200 m Chart Datum.
subsidence	The sinking or settling of land to a lower level in response to various natural and man-caused factors, including: earth movements; lowering of fluid pressure (or lowering of ground water level); removal of underlying supporting materials by mining or solution of solids, either artificially or from natural causes; compaction caused by wetting; oxidation of organic matter in soils; or added load on the land surface. (See also: isostatic subsidence or rise)
subtidal	Area below the high-tide mark, exposed briefly during extreme low tides.
support track	A type of track used to support rail activity. Supporting functions could include railcar storage, railcar repair, engine fuelling, and crew changes.
surficial geology	Study of the physical surface of the earth, including the types and distribution of unconsolidated surface sediments across the landscape, its history, and the processes that act on it.
sustainable use	Use of an organism, ecosystem, or renewable resource at a rate within its capacity for renewal.
sympatric	Of different species or different populations of the same species, occupying the same geographic area without interbreeding.

Term	EIS Definition
<b>T</b>	
T-Yard	A nine track rail yard on the widened causeway for splitting inbound trains into up to 6,000 ft. strings of railcars to be pushed into the IYs, or for assembly of outbound trains in up to 12,000 ft. lengths.
taxa	A taxonomic category or group, such as a phylum, order, family, genus, or species.
Technical Study Area (TSA)	The physical extent for data collection programs, or the physical boundaries for a technical modelling program.
tectonic uplift	A geological process most often caused by plate tectonics which results in an increase in elevation.
terminal infrastructure	Includes the land on which marine terminal operations take place, including sub-grade utilities and ground improvements, and the wharf structure and berths.
terminal operating system (TOS)	A computer control system used by the Terminal Operator Concessionaire to track all of the container movements and storage locations.
terminal operator or terminal operator concessionaire	The entity that will hold the PMV lease to operate the RBT2 terminal.
<b>TERMPOL</b>	A federal government initiative that assesses the safety and risks associated with oil/gas tanker movements to, from and around Canada's marine terminals. TERMPOL is a voluntary Review Process chaired by Transport Canada.
terrestrial	Living or growing on land; not aquatic.
terrigenous	Being or relating to oceanic sediment derived directly from the destruction of rocks on the earth's surface.
Threatened species	A species that is likely to become endangered if limiting factors are not reversed. Pursuant to the <i>Species at Risk Act</i> , a wildlife species that is likely to become an endangered species if nothing is done to reverse the factors leading to its extirpation or extinction.
tidal flow	Movement of water associated with ebbing and flowing tidal currents.
time average sound levels (Leq)	The averaged linear integral or more traditionally known as the equivalent continuous sound level.
top pick	Similar to a reach stacker; however, the boom does not extend, so the top pick picks up the container by the top four corner castings using a spreader.
top sets	Deposits carried out to sea by a river and forming the uppermost sediment layers of its delta. Top sets overlay foresets and bottom sets. (See also: bottom sets; foresets).
total allowable catch (TAC)	The amount of catch that may be taken from a stock determined by analytical procedures to achieve management objectives.
total dissolved solids	The total concentration of dissolved substances in water, including inorganic salts and small amounts of organic matter.

Term	EIS Definition
total suspended solids	A measure of the dry weight of solid materials that are suspended in water. Suspended matter consists of silt, clay, fine particles of organic and inorganic matter, soluble organic compounds, plankton, and other microscopic organisms.
toxicokinetics	The study of how a substance gets into the body and what happens to it in the body. Four processes are involved; absorption, distribution, biotransformation, and excretion.
trace elements	A chemical element present only in minute amounts in a particular sample or environment.
trace organic contaminants	Organic compounds originating from residential and non-residential sources, such as ingredients in drugs, pesticides, consumer products, & industrial process agents (usually present in concentrations much lower than one mg/L) which may have adverse ecological and/or human health effects.
train shunting	A continuous noise signature that is occasionally punctuated by impulsive noise events.
transient	In reference to sound, a sudden increase in sound output which occurs for a short period of time, sometimes less than a fraction of a second.
transmission loss	A measure of how sound levels diminish between a source and receiver over a given distance.
transplants (with respect to marine fish)	Fish of a particular stock that have been intentionally introduced or transferred to an area to enhance production.
Transportation Association of Canada design vehicle (turnpike double)	A truck with a 36-m (118.1-ft.) wheel base towing two 16.2-m (53.1-ft.) trailers capable of transporting two 16.15-m (53-ft.) domestic containers.
tremied concrete	Concrete that is placed underwater through a tube called a tremie pipe. The tremie pipe has a hopper at its upper end and may be open-ended or may have a foot valve, plug or travelling plug to control flow of concrete. Concrete is placed in the hopper and sufficient head of concrete is maintained in the tremie pipe to provide the desired rate of flow for concrete placement in the work. Alternately, the pumped concrete method of placing concrete underwater utilizes a concrete pump with discharge line in similar manner to a tremie pipe.
trend	A trend could be judged to be emerging if values of monitored data or observations were to change consistently and predictably over time toward increasing or decreasing values.
trophic	Of or involving the feeding habits or food relationship of different organisms in a food web.
trophic level	Each of multiple hierarchical levels in an ecosystem consisting of organisms that share the same function in the food web and the same nutritional relationship to primary energy sources.
trophodynamic model	A mathematical model that considers biotic and abiotic components used to capture the dynamics of nutrition or metabolism.
truck call	A truck visit to a terminal consisting of inbound and outbound movements.
truck movement	A one way truck movement, either inbound or outbound.
Tsawwassen First Nation Lands	Lands set out in Appendix C-4 of the <i>Tsawwassen First Nation Final Agreement</i> as Tsawwassen Lands.

Term	EIS Definition
tsunami	A very large ocean wave caused by an underwater earthquake or volcanic eruption.
turbidity	Ability of a liquid to intercept light. Measured in nephelometric turbidity units (NTUs). Cannot be consistently correlated with the concentration of suspended matter.
twenty-foot equivalent unit (TEU)	An internationally recognised measurement for containers. A standard twenty-foot long container equals 1 TEU. A forty-foot long container equals 2 TEUs.
24 (twenty-four)-hour equivalent noise level	A-weighted, Leq noise level, measured over a 24-hour period, with a 10-dB penalty added to the levels between 11:00 p.m. and 7:00 a.m. and a 5-dB penalty added to the levels between 5:00 p.m. and 11:00 p.m. to reflect people's extra sensitivity to noise during the night and the evening.
<b>V</b>	
Valued Component (VC)	Environmental feature that may be affected by a project and that has been identified to be of concern by the proponent, government agencies, Aboriginal peoples, or the public. The value of a component not only relates to its role in the ecosystem, but also to the value people place on it (e.g., scientific, social, cultural, economic, historical, archaeological, aesthetic importance). For the purposes of <i>CEAA 2012</i> , VCs are selected in relation to section 5 of the Act, taking into account direction provided by the responsible authority, or in the case of an EA by a review panel, by the CEA Agency or the Minister.
vehicle	Traffic, other than tractor-trailers, such as cars or trucks driven by employees of or visitors to any of the Roberts Bank terminals. Also refers to a privately owned vehicle.
vehicle access and control system (VACS)	A gated structure and control system on the roadway to the terminal where all vehicles are checked to ensure they have authorisation to enter the terminal. Unauthorised vehicles will be required to turn around. On exit, vehicles pass through an exit gate to be identified in the system as having departed from the terminal.
vertebrate	An animal with a backbone.
vessel	A boat, ship or watercraft.
vessel TEUs	A container terminal's capacity is defined by the TEUs that cross the berth face in any direction (i.e. between vessels and the terminal, and vice versa) in a year. These movement quantities are often termed vessel TEUs.
vibratory piling	A closed off casing that is vibrated into the ground displacing and "densifying" all the material in its path.
vibro-densification	A technique for subsoil improvement that uses a depth vibrator to densify in situ material.
vibro-replacement	A technique for subsoil improvement that utilises special depth vibrators and coarse material to replace the finer subsoil material with the coarser material.
vibro-replacement expressed fines	Unintentional by-releases produced during vibro-densification.
viewscape	In the context of RBT2, the viewing extent from the point of reception towards the Project area. Viewscales can be examined for three key components: point of reception (the location from which the Project area is being viewed); visible area (the portion of the landscape and marine environment that is visible from a specific viewpoint); and Project area (includes the visible portion of the Project).



Term	EIS Definition
viewshed	An area that is visible from a specific location or viewpoint.
visibility	Measurement of the extent to which particular components of a development may be visible from surrounding areas.
visual absorption capability (VAC)	A tool to assess a landscape's susceptibility to visual change caused by man's activities.
Visual Landscape Inventory (VLI)	The identification, classification and recording of visual values on maps.
visual quality class (VQC)	The potential for a landscape to produce varying degrees of satisfaction among viewers.
visual quality objectives (VQO)	Means by which society identifies the level of disturbance that would be acceptable on a viewscape.
viviparous	Producing living, free-swimming, fully-developed young, rather than laying eggs.
volatile fractions	Constituents of a petroleum product consisting of light (lower molecular weight) compounds with a boiling point less than 85°C that evaporate readily and are relatively soluble in the water column.
<b>W</b>	
water hardness	A measure of the amount of calcium and magnesium salts in water. Water hardness is usually expressed as the amount of dissolved calcium carbonate in solution. A number of CCME water quality guidelines are related to water hardness.
waterfowl	Water birds, especially swimming birds, such as ducks and geese.
wave fetch	Area of the sea surface where the wind blows and generates waves and swell. Along with wind speed and wind duration, fetch affects the quality of swell and wave size.
wave height	A measurement of a wave from trough to crest.
wave height bin	Wave height ranges.
wave shadow	Sheltered area on the leeward or downwind side of an obstacle or barrier that blocks or reduces the amount of energy carried by waves.
weather	Current state of the atmosphere.
Westshore Terminals	Refers only to the existing coal port at Roberts Bank.
wharf	A structure where ships may dock to load and unload cargo or passengers that includes one or more berths (mooring locations).
wharf apron	Surface area below the ship-to-shore cranes. For RBT2, the area between the berth face and the terminal's south perimeter dyke.
windrose	A diagram with radiating lines showing the frequency and strength of winds from each direction affecting a specific place.
woodpecker	Any various usually brightly coloured birds of the family Picidae, with strong claws and a stiff tail adapted for clinging to and climbing trees and a chisel-like bill for drilling through bark and wood.
Workplace Hazardous Materials Information System (WHMIS)	A Canada-wide communication system for transmitting information about hazardous materials used in the workplace.

Term	EIS Definition
<b>Y</b>	
yard	A system of non-main railway tracks where rail equipment is switched between tracks or otherwise moved subject to prescribed signals, rules and special instructions.
yield (y)	In reference to the assessment of ecosystem productivity, a measure of productivity per unit area.
<b>Z</b>	
zenith	An imaginary point directly "above" a particular location, on the imaginary celestial sphere. "Above" means in the vertical direction opposite to the apparent gravitational force at that location.
zooplankton	Plankton consisting of small animals and the immature stages of larger animals.