

## Glossary of Terms

Term	Abbreviation	Definition
1:100 year flood event		A flood event that has a 1% probability of occurring in any given year.
Aboriginal peoples		Per the Constitution of Canada includes Indians (on and off reserve Status Indians, First Nations, non-Status Indians, Treaty and non-Treaty Indians), Métis, and Inuit.
Aboriginal Traditional Knowledge	TK	Knowledge that is held by, and unique to, Aboriginal peoples.
Abutment		A structure supporting one end of a bridge span at the same time supporting the embankment which carries the road.
Access route		A path of access to associated portions of a right-of-way, generally temporary and designed for construction-related traffic. Access routes do not make use of existing trails and travel routes, are blocked to public access when not in use, and are decommissioned following construction.
Adaptive management	AM	A structured, iterative process of optimal decision making in the face of uncertainty, with an aim to reducing uncertainty over time via system monitoring. In this way, decision making simultaneously maximizes one or more resource objectives and accrues information needed to improve future management.
Adverse environmental effect		Negative effects on the environment and people that may result from a proposed project and its activities.
Aggregate		A mineral used for construction purposes or as a constituent of concrete other than in the manufacture of cement and includes sand, gravel, clay, crushed stone, and crushed rock.
Alternative means of carrying out a project		The various technically and economically feasible ways, other than the proposed way, for a project to be implemented or carried out.
Alternatives to a project		The functionally different ways, other than a proposed project, to meet the project need and achieve the intended purpose.
All-season road		A road that provides year-round vehicular access to the remote and isolated communities in the region.
All-weather road		Unpaved road that is constructed of a material that does not create mud during rainfall.
Amphibian		Cold-blooded animal of the Class <i>Amphibia</i> that typically lives on land but breeds in water (e.g., frogs, toads, salamanders).
Average annual daily traffic	AADT	Measure used primarily in transportation planning and transportation engineering. It is the total volume of vehicle traffic of a highway or road for a year divided by 365 days. AADT is a useful and simple measurement of how busy a road is.
Anoxic		A condition or environment that lacks oxygen.
Anthropogenic		Relating to, or resulting from the influence of human beings on nature.
Aquatic		Relating to water; living in or near water, taking place in water.

Term	Abbreviation	Definition
Aquatic environment		The components related to, living in, or located in or on water or the beds or shores of a water body including but not limited to all organic and inorganic matter, and living organisms and their habitat, including fish habitat, and their interacting natural systems.
Archaeology		The science that studies human cultures through the recovery, documentation, analysis, and interpretation of material culture and environmental data, including architecture, artifacts, and landscapes, and biofacts.
Archaeological site		A place (or group of physical sites) in which evidence of past activity is preserved, and which has been, or may be, investigated using the discipline of archaeology and represents a part of the archaeological record.
Asatiswisipe Aki Ma Ma Wichitowin Mutual Land Relationship Board		A board created through the Poplar River Traditional Territory Land Relationship Agreement signed by Poplar River First Nation and the Government of Manitoba in October 2008.
Barricade		Any object or structure that creates a barrier or obstacle to control, block passage, or force the flow of traffic in a desired direction.
Baseline environment		A description of the existing environment conditions prior to a specific development.
Bedrock		The native consolidated rock underlying the surficial unconsolidated soils and rock.
Benthic organisms		Organisms living at the bottom of a stream or lake.
Berm		A level space, shelf, or raised barrier separating two areas.
Best Management Practices	BMP	Approaches based on known science that, if followed, should allow a proponent to meet required standard(s) or achieve desired objective(s).
Biodiversity		The variability among living organisms in a given area or during a specified period of time from all sources including terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part.
Biophysical		Refers to a hierarchical land classification system with units characterized by distinct biotic and abiotic elements.
Bog		A wetland ecosystem characterized by water table at or just below the surface, an accumulation of peat, acidic conditions, and a plant community dominated by Sphagnum moss.
Boreal forest		Needle-leafed evergreen or coniferous forest bordering sub-polar regions.
Boreal Shield Ecozone		The largest Ecozone in Canada extending as a broad inverted arch from northern Saskatchewan east to Newfoundland and passing north and east of Lake Winnipeg and north of the Great Lakes and the St. Lawrence River.
Borrow areas		Sites where the existing soil/earth has been tested and determined suitable for road embankment construction. Located within the road right-of-way, where possible.
Box culvert		A square or rectangular-shaped culvert.

Term	Abbreviation	Definition
Broad Area Plan		Plan initiated to recognize the need for sustainable planning due to the uniqueness, abundance, and importance of the east side of Lake Winnipeg, and to follow-up on conclusions of the Climate Change Task Force Report (regarding communities without access to transportation and lack of economic opportunities). It also identified dramatic effects of climate change on winter road and food distribution systems historically relied upon by the remote communities in the Area.
Calving		Giving birth to a calf as applied to moose and or caribou in project study areas.
<i>Canadian Environmental Assessment Act</i>	CEAA	Establishes the legislative basis for the federal practice of environmental assessment in most regions of Canada.
Canadian Environmental Assessment Agency	CEA Agency	A federal body accountable to the Minister of the Environment. The Agency provides high-quality environmental assessments that contribute to informed decision making, in support of sustainable development.
Capacity-building		A managed process of a) skill upgrading, b) procedural improvement, and c) organizational strengthening. It aims to develop the ability of individuals, groups, institutions, and organizations to identify and solve development problems.
Carbon sink		A natural or artificial reservoir that accumulates and stores some carbon-containing chemical compound for an indefinite period. Bogs are a vital natural carbon sink.
Cast-in-place concrete		Concrete that is deposited in the place where it will harden as an integral part of the structure, as opposed to precast concrete.
Cement batch plant		A machine that combines various ingredients to form concrete. Some of these inputs include sand, water, aggregate (rocks, gravel, etc.), fly ash, potash, and cement.
Class 2 Development		Under the Province of Manitoba's <i>Classes of Development Regulation (164/88)</i> , a development that includes two lane roads at new locations, other than roads approved in a plan of subdivision or in conjunction with a development for which a proposal has been submitted, and including associated facilities and borrow pits and widenings of existing roads in areas sensitive to environmental disturbance.
Clear-span bridge		Small-scale bridge structure that completely spans a watercourse without altering the stream bed or bank below the ordinary high water mark.
Cofferdam		A temporary enclosing structure used in the construction of structural elements (e.g., bridge piers) from which water is pumped out and within with construction activity occurs.
Commercial trapping		Trapping that is managed through a Registered Trapline System where the lineholder is granted exclusive opportunity to harvest furbearing animals in a certain area, or eligible community members trap within a block.
Community Benefits Agreements	CBAs	An agreement between ESRA and Poplar River and Berens River First Nations to set out their respective rights, obligations and commitments in relation to ESRA's mandate and this Project.

Term	Abbreviation	Definition
Construction phase		The period associated with the construction. For the proposed P4 Project the construction phase is expected to occur over 8 years (2016-2024).
Corridor		A designated strip of land between two locations used for infrastructure purposes.
Critical habitat		Habitat that is necessary for the survival or recovery of a listed wildlife species and that is identified and included in recovery strategies or action plans.
Crown land		Land owned by the federal or provincial governments. Authority for control of these public lands rests with the Crown. In Canada, 41% of land is federal crown land and 48% is provincial crown land.
Cultural environment		The environment which has developed as a result of human economic and life activity and retains vestiges of such activity (material articles, cultural values, and spiritual values).
Culvert		A tunnel carrying a stream or open drain under a road.
Culvert crossings		A culvert installed for the purpose of allowing a pathway of defined flow or run-off from the road right-of-way to pass under and away from a road.
Cumulative effects		Changes to the environment due to a project combined with the existence of other past, present, and reasonably foreseeable physical activities.
Cumulative impact		The impact on the environment which results from the effects of a project when combined with the environmental effects of other physical activities that have been or will be carried out.
Decommissioning		The process of removing something (i.e., camp or access route) from service.
Demobilization		The process of withdrawal of resources from a project (e.g. construction equipment).
Deposit		A geological process by which material is added to a landform or land mass.
Designated Project		Pursuant to the <i>Regulation Designating Physical Activities SOR/2012-147</i> under the <i>Canadian Environmental Assessment Act, 2012</i> , one or more physical activities that are a) carried out in Canada or on federal lands, b) designated by regulations made under paragraph 84(a) or designated in an order made by the Minister under subsection 14(2), and c) linked to the same federal authority as specified in those regulations or that order.
Direct effect		The consequence of a cause-effect relationship between a project and a specific environmental component.
Dirigible		Lighter-than-air aircraft that can be steered and propelled through the air using rudders and propellers or other thrust.
Disposal		Final placement of unwanted materials or substances.
Diversion ditches		Ditches that transfer water from a stream, lake, aquifer, or other source around a work site.
East Side Road Authority	ESRA	The proponent of the proposed Berens River First Nation to Poplar River First Nation All-Season Road Project.

Term	Abbreviation	Definition
East Side Transportation Initiative	ESTI	A strategic initiative undertaken by ESRA to provide improved, safe and more reliable transportation service for the remote and isolated communities on the east side of Lake Winnipeg.
Ecodistrict		Part of an ecoregion characterized by distinctive assemblages of relief, geology, landforms and soils, vegetation, water, fauna, and land use.
Ecological function		Processes such as nutrient cycling or seed dispersal that are carried out or enabled by an ecosystem and that are necessary for the self-maintenance of that ecosystem.
Ecological land classification		Hierarchical designation describing ecologically distinct areas based on interrelationships of geology, landform, soil, water, vegetation, and human factors, with the Ecozone at the coarsest level.
Ecoregion		Part of a province characterized by distinctive regional ecological factors, including climatic, physiography, vegetation, soil, water, fauna, and land use.
Ecosystem		A dynamic complex of plants, animals and micro-organisms and their non-living environment interacting as a functional unit. The term ecosystem can describe small scale units (e.g., water droplet) as well as large scale units (e.g., biosphere).
Ecozone		An area of the Earth's surface representing large and very generalized ecological units characterized by interaction abiotic (non-living) and biotic (living) factors.
Embankment		A long artificial mound of stone or earth built to hold back water or to support a road or as protection.
Emergency Response Plan	ERP	A plan of actions to be implemented upon the realization of the emergency situation.
Endangered		A species facing imminent extirpation or extinction.
Environment		Components of the earth including a) land, water and air, including all layers of the atmosphere, b) all organic and inorganic matter and living organisms, and c) interacting natural systems that include components referred to in a) and b). Effectively described as air, land, water, plant life, animal life, and humans.
Environmental Assessment	EA	An assessment of the environmental effects of a designated project that is conducted in accordance with the <i>Canadian Environmental Assessment Act</i> . It 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 effects		Changes that may be caused to a physical, socio-economic, cultural, historical, traditional, paleontological, architectural, health-related, or other environmental or socio-economic component within the legislative authority of the Canadian Parliament.

Term	Abbreviation	Definition
Environmental Impact Assessment	EIA	A process to predict environmental effects of proposed initiatives before they are carried out. It identifies potential adverse environmental effects, proposes measures to mitigate adverse environmental effects, predicts whether there will be significant adverse environmental effects after mitigation measures are implemented, and includes a follow-up program to verify the accuracy of the environmental assessment and the effectiveness of the 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</i> 2012. The environmental impact statement 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	Provides an overall environmental management framework for a project to address environmental risks associated with that project.
Environmental monitoring		Periodic or continuous surveillance or testing, according to a predetermined schedule, of one or more environmental parameters. Usually conducted to determine the level of compliance with stated requirements, or to observe the status and trends of a particular environmental component over time.
Environmental Protection Procedures	EPPs	Procedures designed to provide guidance on environmental protection practices for preconstruction and construction activities. Founded on best practices and regulatory requirements.
Ephemeral watercourse		A watercourse that flows during and shortly after periods of high precipitation.
Erosion		By the action of wind, water, and ice, is a natural process in which soil and rock material is loosened and removed.
Equalization culvert		Culvert placed to balance water head and elevation on both sides of an embankment and reduce possible water seepage flow.
Fen		A type of wetland fed by groundwater and runoff, containing peat below the waterline.
Fill		Soil or loose rock used to raise a grade that is manually or mechanically placed.
First Nations		A term used to describe Aboriginal Peoples in Canada who are not Métis or Inuit.
Fish		Includes (a) parts of fish, (b) shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals, and (c) eggs, sperm, larvae, spat, and juvenile stages of fish, shellfish, crustaceans, and marine animals.
Fish habitat		The spawning grounds and nursery, rearing, food supply and migration areas on which fish depend, directly or indirectly, in order to carry out their life processes. Habitat includes the water and the physical and biological components such as streambed, banks, vegetation, etc.

Term	Abbreviation	Definition
Fish salvage		Collecting fish from an isolated section of a watercourse or waterbody where construction or maintenance activities are being completed and relocating them upstream or downstream of this section.
Fish spawning		Deposit of eggs or sperm directly into the water by fish.
Flood		An overflowing of a large amount of water beyond its normal confines, especially over what is normally dry land.
Flow		Physical motion characteristic of fluids used to describe the movement of surface water into project areas.
Follow-up program		A program for verifying the accuracy of the environmental assessment of a project, and determining the effectiveness of any measures taken to mitigate the adverse environmental effects of that project.
Fragmentation		The breaking up of contiguous blocks of habitat into increasingly smaller blocks as a result of direct loss and/or sensory disturbance.
Fugitive dust		Generated from wind erosion caused by roadway construction activities such as rock quarrying or crushing, blasting, excavation, fill placement, and road grading.
Furbearer		Furbearers are a diverse group of mammal species traditionally trapped/hunted for their fur, including both carnivores (meat eating predators) and rodents (gnawing animals).
Geology		A science that deals with the history of the earth as recorded in rocks.
Geotextile material		Porous fabrics manufactured by weaving or bonding fibers made from synthetic materials for use in construction as separators, reinforcement, filtration, and drainage and erosion control.
Geotechnical investigation		An investigation performed to obtain information on the physical properties of soil and rock around a site to design earthworks and foundations for proposed structures and for repair of distress to earthworks and structures caused by subsurface conditions.
Geometric design		Pertaining to roads, it is the branch of highway engineering concerned with the positioning of the physical elements of the roadway according to standards and constraints. The basic objectives in geometric design are to optimize efficiency and safety while minimizing cost and environmental damage.
Granular materials		A collection of discrete solid particles, often of uniform grain size. Gravel, sand, and crushed stone are common examples of granular materials used for road construction.
Groundwater		Water beneath the surface of the land.
Grubbing		Removing and disposing of all stumps, roots, unmerchantable trees, and overburden material from the road right-of-way.
Habitat		The place or type of site where an organism or population naturally occurs. Species may require different habitats for different uses throughout their lifecycle.



Term	Abbreviation	Definition
Habitat offsetting		Measures undertaken to counterbalance unavoidable <i>serious harm to fish</i> resulting from a project, with the goal of maintaining or improving the productivity of the fishery. Replacement or increasing the productivity of existing habitat are example measures.
Habitat Suitability Index Model	HSIM	A model designed to facilitate application where timber and wildlife management actions are being coordinated in integrated resource planning. In this case the model is used to identify impacts to woodland caribou habitat. It is intended to provide forest and wildlife managers with a tool which will quantify and qualify habitat for woodland caribou.
Hazardous materials		Dangerous good in any solid, liquid, or gas form that can harm people, other living organisms, property, or the environment.
Heavy equipment		Engineering vehicles specially designed for executing substantive construction tasks.
Heritage resources		A land or resource (e.g., an artifact, object, or place) that is considered as heritage or any structure, site, or thing is distinguished from other lands and resource by the value placed on it.
Heritage Resources Impact Assessment	HRIA	A process used to assess how a proposed land use or development project will affect potential heritage resources and recommends strategies for avoiding or mitigating impacts.
Herptile		Term for reptiles and/or amphibians.
Hydraulic		Relating to a liquid moving in a confined space under pressure.
Hydrocarbons		Organic compounds that contain only carbon and hydrogen (e.g., gasoline).
Impact		A positive or negative effect of a disturbance on the environment or a component of the environment.
Indigenous and Northern Affairs Canada	INAC	Federal government department responsible for meeting the Government of Canada’s obligations to First Nations, Inuit and Metis, and for fulfilling the federal government’s constitutional responsibilities in the North. Formerly Aboriginal Affairs and Northern Development Canada (AANDC).
Indirect effect		A secondary environmental effect that occurs as a result of a change that a project may cause on the environment. At least one step removed from a project activity in terms of cause-effect linkages.
Indicator species		An organism whose presence, absence, or abundance reflects a specific environmental condition. They can signal a change in the biological condition of a particular ecosystem, and thus may be used as a proxy to diagnose the health of an ecosystem.
<i>In situ</i>		A Latin phrase meaning ‘in the place’; typically to describe on-site testing (e.g., surface water quality).
Invasive species		Any species that has been introduced to an environment where it is not native, and that has since become a nuisance through rapid spread and increase in numbers, often to the detriment of native species.



Term	Abbreviation	Definition
Land use		The human modification of natural environment or wilderness into built environment.
Laydown area		An area cleared for temporary storage of construction equipment and supplies, generally covered with rock and/or gravel.
Loam		The loam textural classes of soil have mixtures of sand, silt, and clay in different proportions. The great majority of till parent materials in Canada are loams (loam, sandy loam, clay loam) because mixing and direct deposition by the ice does not sort the different particle sizes into distinct size classes.
Local Assessment Area	LAA	The area beyond the Project Footprint where Project effects are measurable.
Maintenance		Keeping a structure, fixture or foundation in proper condition in a routine, scheduled, or anticipated fashion and preventing its failure or decline.
Manitoba Conservation and Water Stewardship	MCWS	A department of the Government of Manitoba that oversees environmental stewardship, species at risk, forestry, and related matters. The department is overseen by the Minister of Conservation and Water Stewardship.
Mechanical brushing		The removal of brush and small trees growing in the right-of-way using a heavy duty rotary cutter on a boom, a hydraulic excavator or the front of a log skidder.
Medicinal plants		Plants used by humans for therapeutic purposes.
Métis		A people of North American Indian and European ancestry who coalesced into a distinct nation in the northwest in the late 18th century. The Métis are one of three distinct Aboriginal peoples of Canada, recognized under section 35 in the 1982 Constitution.
Migratory bird		As defined by federal legislation, “migratory birds” means game, non-game and insectivorous birds native to Canada which show regular seasonal movement between breeding and wintering grounds.
Mitigation measures		Measures developed and implemented for the elimination, reduction or control of the adverse environmental effects of physical activities associated with a project.
Natural resources		Economically referred to as land or raw materials, natural resources occur naturally within environments that exist relatively undisturbed by mankind, in a natural form.
Natural variation		Changes in a Valued Component (e.g., moose population in the local assessment area) that are indistinguishable from background conditions as influenced by naturally-occurring physical and/or biological processes as well as past and current anthropogenic activities.
Non-scheduled watercourse		A waterway that is not listed on the schedule to the <i>Navigation Protection Act</i> .
Northern Affairs Community	NAC	Organization of communities under the legal administration of the Manitoba Department of Aboriginal and Northern Affairs. These communities are legal communities and may or may not be Métis.

<b>Term</b>	<b>Abbreviation</b>	<b>Definition</b>
Operations phase		Refers to the point at which construction of the ASR is complete and it begins to function as an ASR providing the intended transportation link.
Organic materials		Materials that have been contributed to the soil from living organisms- roots, leaves, microorganisms, and larger animals. The freshly added organic material typically undergoes a series of transformation through microbial processes. These processes liberate essential nutrients from the organic matter and leave behind less palatable organic materials and organic by-products.
Outcrop		The part of a rock formation that appears above the surface of the surrounding land.
Overburden		The soil (including organic material) or loose material that overlies bedrock.
pH		Method of expressing acidity or alkalinity of a solution. pH is the logarithm of the reciprocal of the hydrogen ion concentration, with pH 7.0 indicating neutral conditions.
Physical environment		Refers to the terrain, geology, hydrogeology, hydrology, air, and water of a project area.
Posted speed		Maximum speed permitted at a specific location on a transport corridor.
Pools and riffles		The naturally undulating profile of most streams, formed by coarse materials that accumulate on stream beds at intervals. Upstream from the accumulations, a shallow pool is impounded. Downstream from the crest of the accumulation, a local increase in slope causes the flow to accelerate, forming a riffle or rapids.
Precipitation		The amount of rainfall and snow generated.
Project alternatives		The various technically and economically feasible ways, other than the proposed way, for a Designated Project to be implemented or carried out.
Project Footprint	PF	The physical space or directly affected area on which project components or activities are located. For the aquatic environment, the PF is the area of the watercourse directly affected by the road crossings, including the riparian zone areas associated with the watercourse.
Proponent		The person, body, federal authority or government that proposes the carrying out of a Designated Project.
Quarry		A mine established or operated by surface excavation for the purpose of removing consolidated quarry mineral.
Raptors		Birds of prey, including hawks, owls, falcons, and eagles.
Regional Assessment Area	RAA	The area beyond the Local Assessment Area (LAA) within which most indirect and cumulative effects would occur. For the aquatic environment, the RAA would include any areas upstream or downstream of the LAA that are connected to the Project Footprint watercourses.
Residual effect		An environmental effect that remains, or is predicted to remain, even after mitigation measures have been applied.

Term	Abbreviation	Definition
Riparian area		An area that links water to land. It borders streams, lakes, and wetlands. The blend of streambed, water, trees, shrubs, and grasses in a riparian area provides fish habitat, and directly influences it.
Riprap		A layer of durable quarried or field rock placed at both the inlet and outlet of culverts or around bridge abutments to stabilize fill slopes around the drainage structure and prevent water from eroding soil.
Right-of-way	RoW	The width and length of cleared area along the road alignment which contains the road bed, ditches, side slopes, and back slopes.
Road alignment		The route of a road, defined as a series of horizontal tangents and curves, as defined by planners and surveyors.
Runoff		Water flow which occurs when soil is infiltrated to full capacity and excess water, from rain, snowmelt, or other sources flows over the land.
Rock fill		A fill, comprised of large, loosely placed rocks.
Sediment		Any particulate matter that can be transported by fluid flow, and which is eventually deposited.
Silt fencing		A temporary measure for sedimentation control. Silt fences usually consist of posts with filter fabric stretched across the posts and sometimes with a wire support fence. The lower edge of the fence is vertically trenched and covered by backfill. A silt fence is used in small drainage areas to detain sediment. They are most effective when there is overland flow (runoff that flows over the surface of the ground as a thin, even layer) or in minor swales or drainage ways.
Socio-Economic Impact Assessment	SEIA	Provides detailed information about effects, both positive and negative, that a proposed project may have on people, their lifestyles, and their communities. In particular, effects that flow from biophysical effects are included. Also provides way to address the effects.
Species at Risk	SAR	Those species potentially affected by a project that are: listed by COSEWIC as extirpated, endangered, threatened, or of special concern; in Schedule 1 of the federal <i>Species at Risk Act</i> ; and listed as Endangered or Threatened in <i>The Endangered Species and Ecosystems Act of Manitoba</i> .
Staging areas		Designated area where vehicles, supplies, and construction equipment are positioned for access and use to a construction site.
Steel girder		A beam or compound structure composed of steel, acting as a beam carrying principally transverse loads which develop normal reactions at the supports.
Subgrade		The soil prepared to support a pavement structure or a pavement system. It is the foundation for the pavement structure.
Substrate		The composition of a streambed, including either mineral or organic materials.

Term	Abbreviation	Definition
Surface water		Water collecting on the ground or in a stream, river, lake, wetland, or ocean; it is related to water collecting as groundwater or atmospheric water.
Sustainable development		Meeting the needs of the present without compromising the ability of future generations to meet their own needs.
Terrain		Refers to the lay of the land. Usually expressed in terms of the elevation, slope, and orientation of terrain features. Terrain affects surface water flow and distribution.
Threatened		A species likely to become endangered if limiting factors are not reversed.
Tourism		Travel for recreational, leisure, or business purposes.
Travel route		A well-defined route created and/or originally used by Aboriginal community members for travel between communities and for traditional purposes. Current use may extend to non-Aboriginal individuals and groups.
Treaty Lands Entitlement areas	TLE	Areas of land that have been added to an existing reserve through TLE claims. TLE claims are intended to settle the land debt owed to those First Nations who did not receive all the land they were entitled to under historical treaties signed by the Crown and First Nations.
Tributary		A freshwater stream that feeds into a larger stream or river. Tributaries, also called affluents, do not flow directly into the ocean.
Turbidity		A measure of the lack of clarity or transparency of water caused by biotic and abiotic suspended or dissolved substances. The higher the concentration of these substances in water, the more turbid the water becomes.
Ungulate		Refers to any animal that is hoofed.
Valued Component	VC	The environmental element of an ecosystem that is identified as having scientific, social, cultural, economic, historical, archaeological, or aesthetic importance. Provide the foundation for the assessment of project effects.
Waste disposal		Processing or removal of wastes to final place of deposition or transfer to a place for re-use or recovery.
Watershed		The area of land that drains into rivers and lakes, which in turn, flow to a common outlet.
Wetland		Land dominated by bogs/fens that is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, hydrophytic vegetation, and various kinds of biological activity which are adapted to a wet environment.
Windrow		Bulldozing stumps, roots, unmerchantable trees, and overburden material into a long low ridge parallel to the roadway and inside the right-of-way.
Winter road		Seasonal road, only used after ground is frozen.

## Units

Unit	Definition
ha	hectare
km	kilometre
km/h	kilometres per hour
kPa	kilopascal
m	metre
m <sup>2</sup>	metres squared
m <sup>3</sup>	metres cubed
mm	millimeter
masl	metres above sea level

## Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AADT	Average Annual Daily Traffic
AM	Adaptive management
APEP	Aboriginal and Public Engagement Program
ARU	Automatic Recording Unit
BAP	Broad Area Plan
BMP	Best Management Practice
BRFN	Berens River First Nations
CBA's	Community Benefits Agreements/Collective Bargaining Agreement
CEAA	<i>Canadian Environmental Assessment Act</i>
CEA Agency	Canadian Environmental Assessment Agency
CEP	Community Engagement Program
COSDI	Consultation on Sustainable Development Implementation
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
CRHS	Canadian Heritage Rivers System
CRA	Commercial, Recreational or Aboriginal
CPEMS	Construction Phase Environmental Management Plans
CPIP	Community and Public Involvement Plan
DFO	Department of Fisheries and Oceans
EAP	Environment Act Proposal
EBM	Ecosystem based management
EA	Environmental Assessment
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EPPs	Environmental Protection Procedures
ERP	Emergency Response Plan
ESC	Erosion and Sediment Control
ESLW	East Side of Lake Winnipeg
ESPI	East Side Planning Initiative
ESRA	East Side Road Authority
ESRT	East Side Round Table
ESTI	East Side Transportation Initiative
FML	Forest Management License
FMU	Forest Management Unit
GDC	Geometric Design Criteria
GHA	Game Hunting Area
GHG	Greenhouse Gas
GR130	General Requirements – Environmental Protection Specifications
HRIA	Heritage Resources Impact Assessment
HSIM	Habitat Suitability Index Model
INAC	Indigenous and Northern Affairs Canada

Acronym/Abbreviation	Definition
ISO	International Organization for Standardization
LAA	Local Assessment Area
LATNS	Large Area Transportation Network Study
MCWS	Manitoba Conservation and Water Stewardship
ESRA	Manitoba East Side Road Authority
FN	First Nation
MCWS	Manitoba Conservation and Water Stewardship
MBCDC	Manitoba Conservation Data Centre
MBESA	<i>The Endangered Species Act of Manitoba</i>
MIT	Manitoba Infrastructure and Transportation
MMF	Manitoba Metis Federation
MWQSOGs	Manitoba Water Quality Standards, Objectives, and Guidelines
NAC	Northern Affairs Community
NGO	Non-governmental Organization
OPEMP	Operation Phase Environmental Management Plan
P4	Project 4
PAG	Potentially acid generating
PF	Project Footprint
PR	Provincial Road
PRFN	Poplar River First Nations
RAA	Regional Assessment Area
RCMP	Royal Canadian Mounted Police
RoW	Right-of-way
RTL	Registered Trapline
SAR	Species at Risk
SEIA	Socio-Economic Impact Assessment
TAC	Technical Advisory Committee/Transportation Association of Canada
TK	Traditional Knowledge (Aboriginal)
TLE	Treaty Lands Entitlement
TLUKS	Traditional Land Use, Values and Knowledge Study
TSS	Total Suspended Solids
UNESCO	United Nations Educational, Scientific, and Cultural Organization
VC	Valued Component