

SOCIO-ECONOMICS

Generation PGM Inc. will play an active role in supporting local community initiatives and services to ensure the Project has a net positive effect in the region.

The Project will bring much needed economic benefits to local and regional communities and Indigenous peoples along the north shore of Lake Superior including:

Increased direct, indirect and induced employment opportunities during all Project phases;

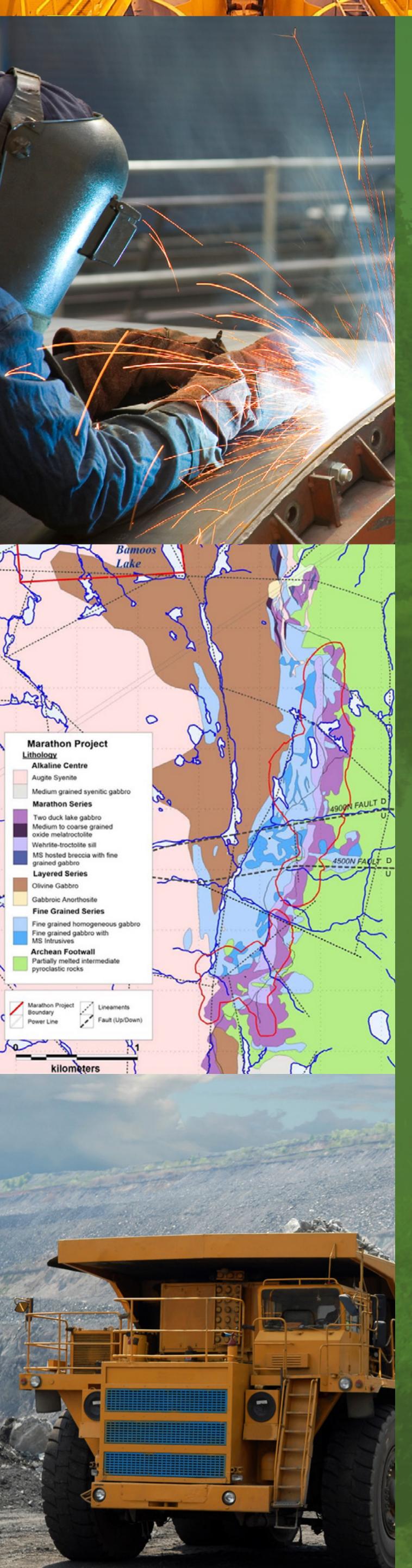
Increased labour incomes in local communities;

Increased economic and business opportunities particularly in the site preparation and construction and operations phases; and,

Increased government revenues (taxes, royalties) for all levels of government during all Project phases.







MARATHON PALLADIUM PROJECT

- Generation PGM Inc. (GenPGM)
 proposes to develop an open pit mine
 and milling operation near the Town
 of Marathon and the community of
 Biigtigong Nishnaabeg.
- Ore will be processed (crushed, ground and concentrated) at an on-site processing facility.
- Final concentrates containing palladium (Pd) and copper (Cu), will be transported off-site via road and/or rail to a smelter and refinery for subsequent metal extraction and separation.
- The site preparation and construction phase will take 18 to 24 months. During peak construction workforce can reach up to 900 workers with an average of approximately 450 to 550.
- Production is estimated to start late 2023. For the operations phase, the workforce will comprise of an estimated 350 to 400 workers.
- The mine has been designed to ensure that the environment will be protected. Air emissions will be limited, water will be treated prior to discharge and disturbed areas will be reclaimed in a progressive manner throughout the mine life.
- Palladium and copper are considered "green metals". Pd is used in vehicle engines to clean exhaust gas and Cu will be used significantly in battery and continued electrification of the future.







MARATHON PALLADIUM PROJECT STATUS

Key milestones and activities completed and upcoming for the Marathon PGM-Cu Project include:

Mine Feasibility

A Preliminary Economic Assessment (PEA) was completed in January 2020, and indicates improvements in economics of mine. A Mine Feasibility Study is currently underway and planned for release in early 2021.

Environmental Assessment

The Environmental Assessment (EA) was paused for the Marathon Palladium Project in 2014. An ongoing Baseline Environmental Program was conducted from 2014 to 2019, and in preparation for the restart of the EA for the Project, the program was enhanced in spring 2020.

Consultations with the federal Impact Assessment Agency (IA Agency) and the provincial Ministry of Environment Conservation and Parks (MECP) resumed in spring 2020.

Since the Project was only paused, it will resume where it left off in the Review Panel process under the former Canadian Environmental Assessment Act (CEA Act 2012).

The official restart of the Project was posted on Impact Assessment Registry in July 2020, which can be viewed at:

www.iaac-aeic.gc.ca/050/ evaluations/proj/54755



Key Steps for 2019/2023

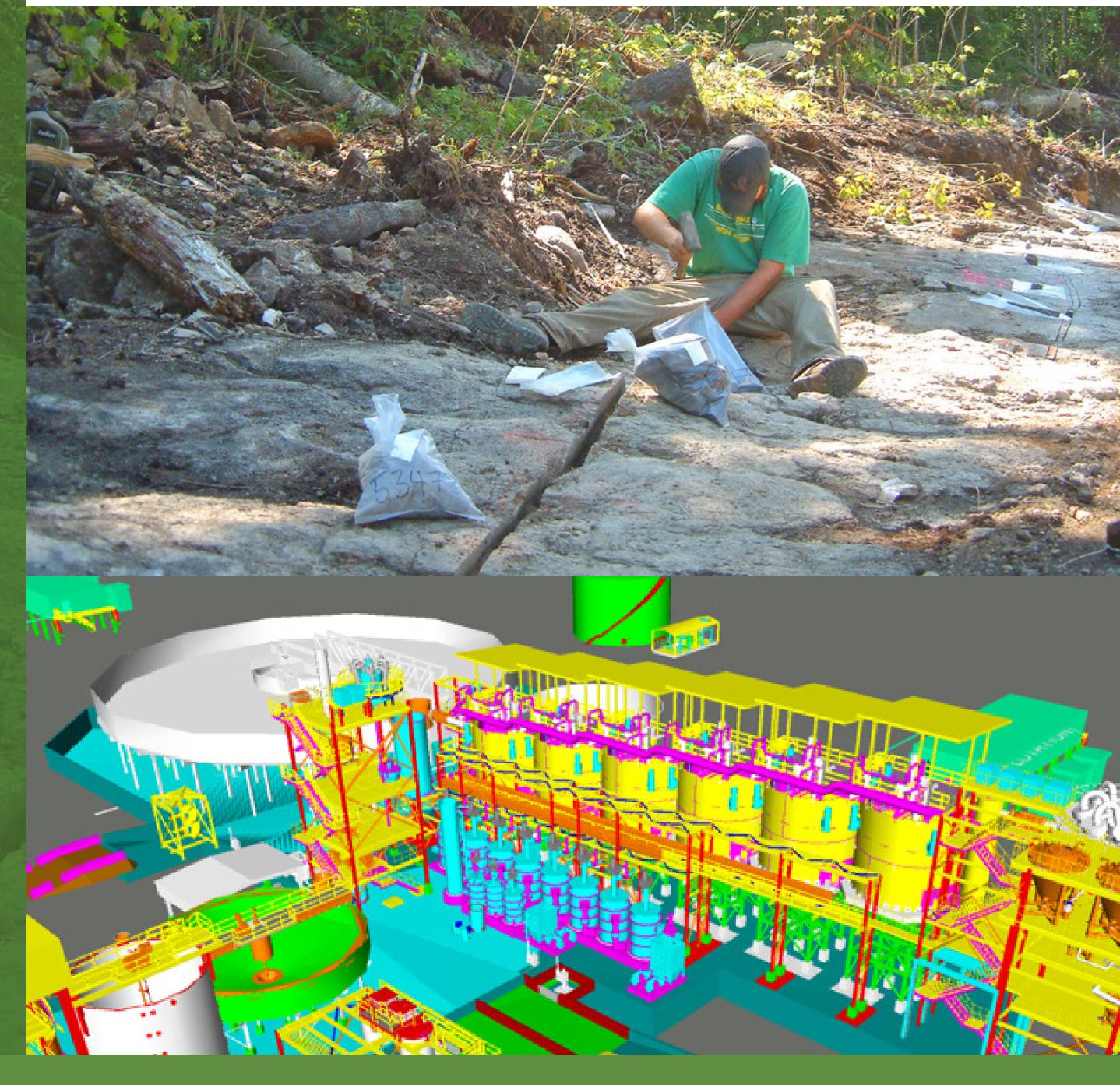
PRELIMINARY ECONOMIC ASSESSMENT

COMPLETE FEASIBILITY STUDY OBTAIN ENVIRONMENTAL APPROVALS/ PERMITS

BEGIN CONSTRUCTION COMMENCE PALLADIUM PRODUCTION

TIMELINE (ESTIMATED)

	2019	2020	2021	2022	2023		
Asset Acquisition	✓						
Update Resource	√						
PEA Study	√	√					
New Listing		√					
Feasibility Study		V					
Permits/Social Approvals		√					
Construction							
Production							





ENVIRONMENTAL ASSESSMENT

FRAMEWORK AND THE PERMITTING PROCESS

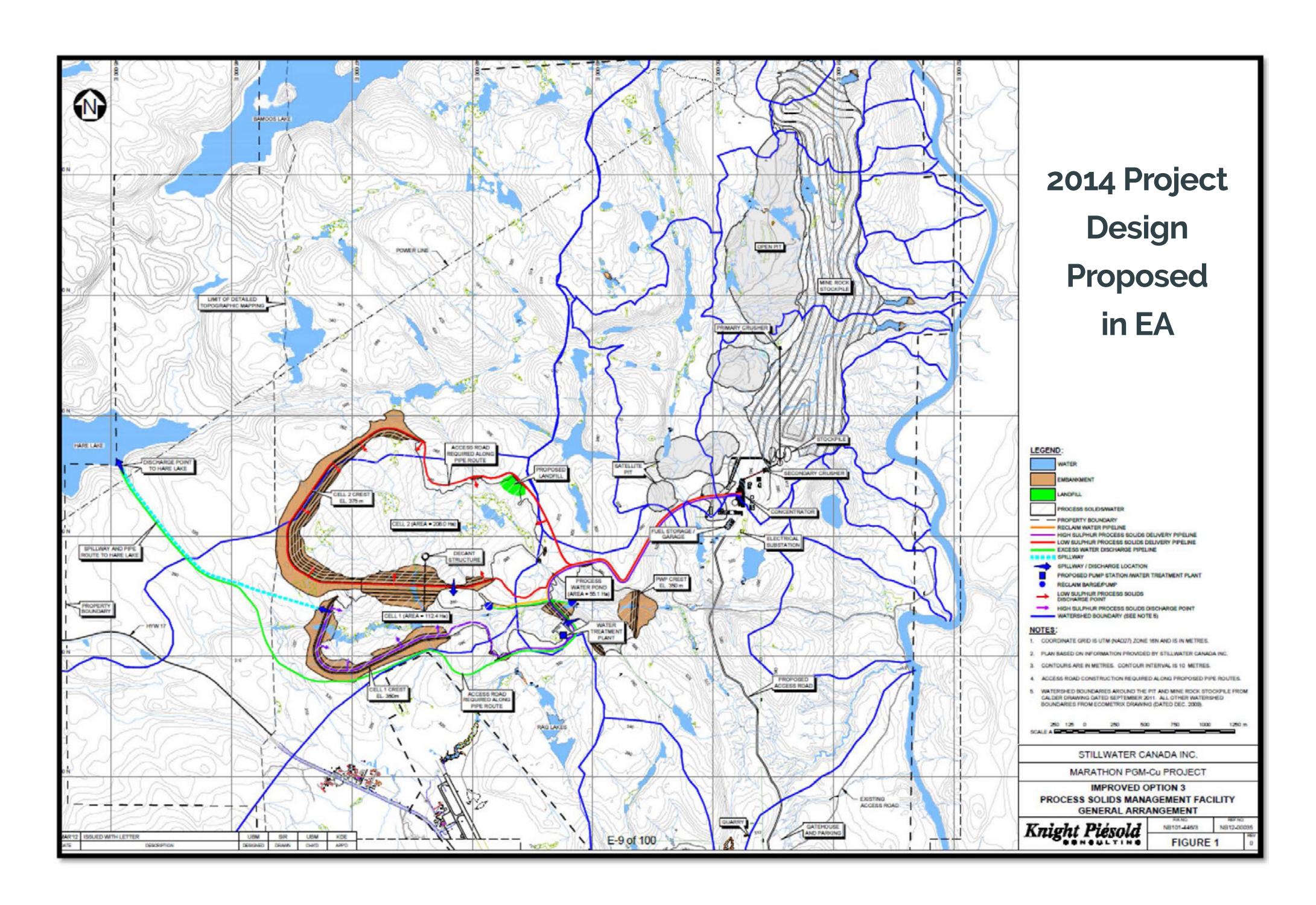
The Marathon Palladium Project is subject to federal environmental assessment (EA) legislation. Provincially, certain aspects of the Project such as the transmission corridor, highway improvements and Crown land disposition are subject to Ontario EA legislation.

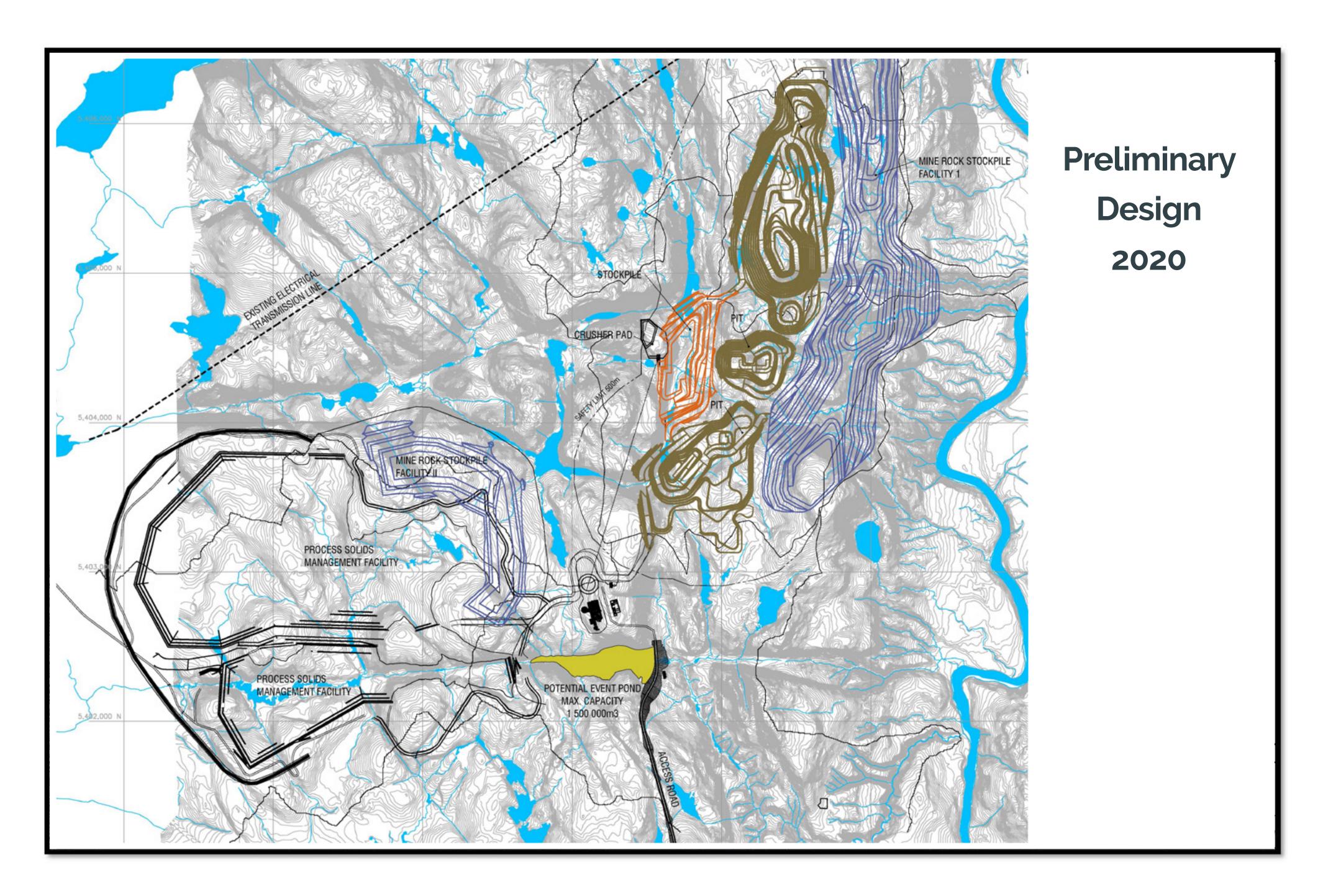
A Voluntary Agreement is in place to have the entire Project reviewed under the Ontario Environmental Assessment Act and allowed the province to establish a Harmonization Order. The Harmonization Order facilitates the integration of both the federal and provincial governments' environmental assessment requirements through a joint panel review process.

In addition to the EA process, there are various permits and approvals that Generation PGM Inc. must obtain to allow the Project to go forward. These permits and approvals are obtained from all levels of government.



	TENTATIVE TIMELINE for ENVIRONMENTAL ASSESSMENT																						
	2020					2021												2022					
Stages for Environmental Assessment	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
Baseline Data Collection/Confirm																							
Prepare Baseline Addendum																							
Complete Impact Analysis/Models																							
Joint Review Panel (JRP) Appointed																							
Prepare Main Report Addendum																							
Submit Addendum(s)																							
Public Review Period																							
JRP Information Requests (IRs)																							
GenPGM Review and Respond to IRs																							
JRP Review - Sufficiency Determined																							
Panel Hearing Notice																							
Public Hearings																							
Joint Review Panel Report																							
Environment Ministers Decision																							







VALUED ECOSYSTEM COMPONENTS

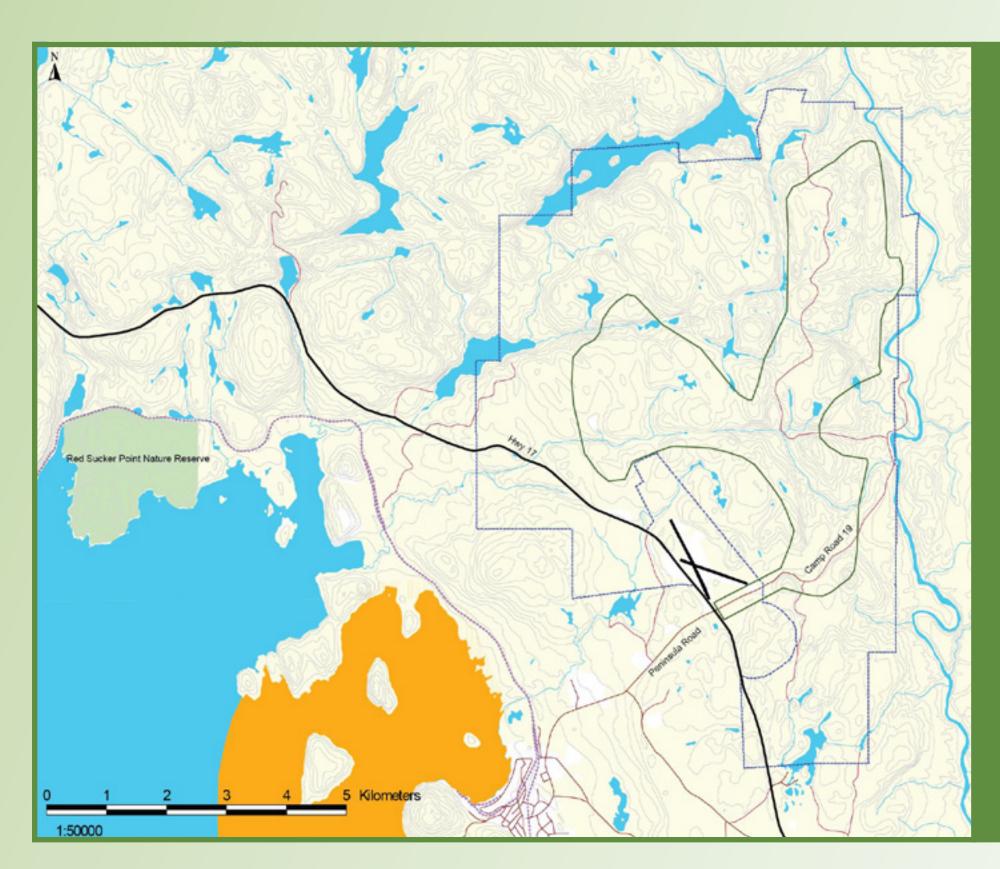
A Valued Ecosystem Component or VEC/VC can be defined as:

"Elements of the human and natural environment that are perceived as important by participants in the assessment process."

"...an environmental element of an ecosystem that is identified as having scientific, ecological, social, cultural, economic, historical, archaeological or aesthetic importance. The value of an ecosystem component may be determined on the basis of cultural ideals or scientific concern."

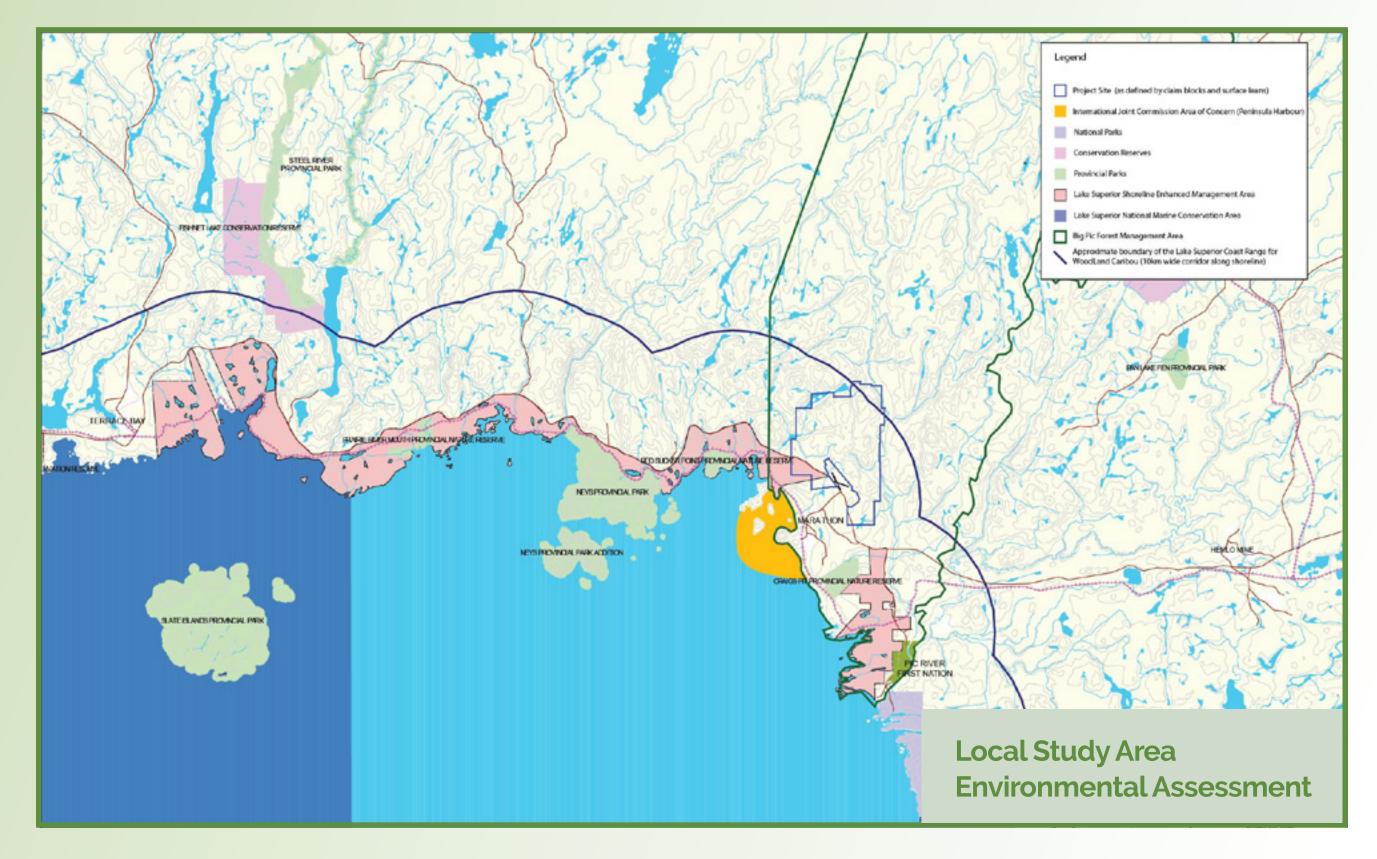
For the purposes of the 2012 Environmental Impact Statement (EIS) Report, VECs were selected based on:

- prior experience with similar projects
- data that were collected as part of the baseline environmental program
- information available with regards to species that are afforded protection by legislation
- guidance from regulatory agencies (e.g. EIS Guidelines)
- direct consultation with stakeholders and Indigenous communities



PROJECT AREA

- 2020 optimizied design largely unchanged from 2014
- project boundary is the same (blue outline)
- 2020 project study area (green outline), relatively the same as 2014
- powerline and access road alternatives being considered





Examples

- the physical environment (media and habitats)
- vegetation
- wildlife
- species at risk
- aquatic resources
- the social environment
- the economic environment
- land and resource uses
- physical and cultural heritage
- Indigenous and Community considerations