



**Marathon Palladium Project
Socio-economic and Current
Resource Use Updated Baseline
Report**

FINAL

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Prepared for:

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Abbreviations

°	Degree
AADT	Average Annual Daily Traffic
APS	Anishinabek Police Service
BN	Biigtigong Nishnaabeg
CAO	Chief Administrative Officer
CEAA, 2012	Canadian Environmental Assessment Act, 2012
CIAR	Canadian Impact Assessment Registry
CSD	Census Subdivision
CSI	Crime Severity Index
Cu	Copper
CWB	Community Well-Being
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMS	Emergency Medical Services
Fe	Iron
ISC	Indigenous Services Canada
km	Kilometres
km/h	Kilometres per hour
kV	Kilovolt
LHIN	Local Health Integration Network
LRU	Land and resource use
LSA	Local Study Area
m	Metres
MiHR	Mining Industry Human Resources Council
MRSA	Mine Rock Storage Area
MW	Megawatts
MWh	Megawatt-hour



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NAG	Non-acid generating
NAICS	North American Industry Classification System
NOC	National Occupational Classification
OPP	Ontario Provincial Police
O. Reg	Ontario Regulation
PAG	Potentially acid generating
PGM	Platinum Group Metals
PMFN	Pic Moberg First Nation
PPFN	Pays Plat First Nation
PSMF	Process Solids Management Facility
RCMP	Royal Canadian Mounted Police
RSA	Regional Study Area
SSA	Site Study Area
VEC	Valued Ecosystem Component



MARATHON PALLADIUM PROJECT SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT

Introduction
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1.0 INTRODUCTION

Generation PGM Inc. (GenPGM) proposes to develop the Marathon Palladium Project (the “Project”), which is a platinum group metals (PGM) and copper (Cu) open pit mine and milling operation near the Town of Marathon, Ontario. The Project is being assessed in accordance with the *Canadian Environmental Assessment Act* (CEAA, 2012) and Ontario’s *Environmental Assessment Act* (EA Act) through a Joint Review Panel (the Panel) pursuant to the *Canada-Ontario Agreement on Environmental Assessment Cooperation* (2004).

Stantec Consulting Ltd. (Stantec) has been retained by GenPGM to conduct an updated assessment of socio-economic baseline conditions for the Project. This report provides an update to the baseline conditions as described in the information currently on the record, including:

- Marathon PGM-Cu Environmental Impact Statement prepared by Stillwater Canada Inc. (2012) (CIAR# 224)
- Supplemental Information Document #22: Baseline Economic and Social Conditions in the Vicinity of the Marathon PGM-Cu Project prepared by gck Consulting (2011) (CIAR #234)
- Supplemental Information Document #23: Economic and Social Impact Assessment for the Marathon PGM-Cu Project prepared by Stantec Consulting Ltd. (2012) (CIAR # 234)
- Response to IR 16.7, Crown Land Use Policy (CIAR#457)
- Response to IR 4.2.4 – Road Access and Drainage Pipeline Options (CIAR # 406)

This socio-economic baseline study has been completed to inform the Addendum to the Marathon PGM-Cu Environmental Impact Statement (EIS Addendum) as input to the Joint Review Panel process. It has been prepared pursuant to the *Canadian Environmental Assessment Act, 2012* and in consideration of the *Guidelines for the Preparation of an Environmental Impact Statement – Marathon Platinum Group Metals and Copper Mine Project* (EIS Guidelines) (Canadian Environmental Assessment Agency and Ontario Ministry of Environment 2011).

The information presented in this report is intended to summarize and document any changes to the existing socio-economic environment, relative to those conditions considered in the previous assessment, in order to support the updated assessment of potential environmental effects provided in the EIS Addendum.

The information presented herein was obtained from a review of historical information and the updated design plans for the Project provided by GenPGM.



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1.1 PROJECT LOCATION

The Project is located approximately 10 km north of the Town of Marathon, Ontario (Figure 1, Appendix A) Marathon is a community of approximately 3,300 people (Statistics Canada, 2017) located adjacent to the Trans-Canada Highway (Highway 17) on the northeast shore of Lake Superior approximately 300 km east of Thunder Bay and 400 km northwest of Sault Ste. Marie. The centre of the Project footprint sits at approximately 48° 47' N latitude, 86° 19' W longitude (UTM NAD83 N16 Easting 550197 and Northing 5403595). The footprint of the proposed mine location is roughly bounded by Highway 17 and the Marathon Airport to the south, the Pic River and Camp 19 Road to the east, Hare Lake to the west, and Bamooos Lake to the north (Figure 1, Appendix A). Access is currently gained through Camp 19 Road.

The Project is proposed within an area characterized by relatively dense vegetation, comprised largely of a birch and spruce-dominated mixed wood forest. The terrain is moderate to steep, with frequent bedrock outcrops and prominent east-west oriented valleys. Several watercourses and lakes traverse the area, with drainage flowing either eastward to the Pic River or westward to Lake Superior. The climate of this area is typical of northern areas within the Canadian Shield, with long winters and short, warm summers.

The Project is proposed on Crown Land, with GenPGM holding surface and/or mineral rights for the area. Regional land-use activities in the area include hunting, fishing, trapping and snowmobiling, as well as mineral exploration (and mining) and forestry. Other localized land uses in the area include several licensed aggregate pits, the Marathon Municipal Airport, the Marathon Landfill, a municipal works yard and several commercial and residential properties.

The primary industries in the area have historically been forestry, pulp and paper, mining, and tourism. Exploration for copper and nickel deposits in the area extend as far back as the 1920s. A large copper-PGM deposit was discovered in 1963. Advanced exploration programs have continued across the site since then. These programs have been supported by various feasibility studies to confirm the economic viability of extracting the deposits.

Several First Nation and Métis groups were originally identified as having a potential interest in the Project based on Treaty Rights, asserted traditional territory, and proximity to the Project. Traditional uses which they have identified as occurring in the area include hunting, trapping, fishing, and plant harvesting, with activities generally focused on the larger waterways, such as the Pic River, Bamooos Lake, and Hare Lake.

1.2 PROJECT OVERVIEW

The Project is based on the development of an open pit mining and milling operation for copper and PGMs. Ore will be mined from the pits and processed (crushed, ground, concentrated) at an on-site processing facility. Final concentrates containing copper and PGM will be transported off-site via existing roadways and/or rail to a smelter and refinery for subsequent metal extraction and separation. An iron



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sulfide concentrate may also be produced, depending upon the results of further metallurgical testing and market conditions at that time.

The construction workforce will average approximately 450-550 people, with a peak workforce of an estimated 900 people, and will be required for between 18 and 24 months. During operations, the workforce will comprise an estimated 350 workers. The mine workforce will reside in local and surrounding communities, as well as in an accommodations complex that will be constructed off site.

Most of the mine rock¹ produced through mining activities is non-acid generating (NAG) and will be permanently stored in a purposefully built Mine Rock Storage Area (MRSA). The NAG (also referred to as Type 1 mine rock) will also be used in the construction of access roads, dams, and other site infrastructure, as needed. Drainage from the MRSA will be collected in a series of collection basins and treated, as necessary, to meet applicable water quality criteria prior to discharge to the Pic River. The remaining small portion of the mine rock is considered to be potentially acid generating (PAG) (also referred to as Type 2 mine rock) and will be stored in the open pits or the Process Solids Management Facility (PSMF). This will ensure that drainage from the Type 2 mine rock will be contained during operations. Following closure, the Type 2 mine rock will be permanently stored below water by flooding the open pits and maintaining saturated conditions in the PSMF to prevent acid generation in the future.

Most of the process solids² produced at the site will be NAG (Type 1 process solids) with the minority being PAG (Type 2 process solids). Both the Type 1 and Type 2 process solids will be stored in the PSMF and potentially within the open pits. In both cases, the Type 2 process solids will be managed to prevent acid generation during both the operation and closure phases of the Project. Water collected within the PSMF as well as water collected around the mine site (other than the MRSA), such as water pumped from the pits or run-off collected from the plant site, will be managed within the PSMF. Excess water not needed for processing ore will be discharged, following treatment as necessary, to Hare Lake.

Access to the Project is currently provided by the Camp 19 Road, opposite Peninsula Road at Highway 17. The existing road will be upgraded and utilized from its junction with Highway 17 to a new road running north that will be constructed to access the Project site. The Project will also require the construction of a new 115 kV transmission line that will connect to the Terrace Bay-Manitouwadge transmission line (M2W Line). The width of the transmission corridor will be approximately 30 m.

Disturbed areas of the Project footprint will be reclaimed in a progressive manner during all Project phases. Natural drainage patterns will be restored as much as possible. The ultimate goal of mine decommissioning will be to reclaim land within the Project footprint to permit future use by resident biota and as determined through consultation with the public, Indigenous people and government. A certified Closure Plan for the Project will be prepared as required by Ontario Regulation (O. Reg.) 240/00 as

¹ Mine rock: rock that has been excavated from active mining areas but does not have sufficient ore grades to process for mineral extraction.

² Process solids: solids generated during the ore milling process following extraction of the ore (minerals) from the host material.



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amended by O. Reg. 194/06 “Mine Development and Closure under Part VII of the Mining Act” and “Mine Rehabilitation Code of Ontario”.

A further description of the Project and associated activities and phases will be provided under separate cover in the EIS Addendum.

1.3 STUDY OBJECTIVES

This updated socio-economic baseline study provides information to inform the EIS Addendum for the Project. The objectives of this update were to describe and present available information and to characterize changes to the baseline conditions in the study area. The scope of the updated socio-economic baseline study includes the following:

- summary of findings of the existing baseline studies (Section 2.0)
- identification of regulatory guidance for the collection of baseline data (Section 3.0)
- confirmation of spatial boundaries (Section 4.0)
- description of the data collection methods and a review of available background information and data, including any additional and/or on-going data collection efforts (Section 5.0)
- analysis of information to characterize existing baseline conditions and to determine any changes that have occurred since 2011 (Section 6.0)
- an updated summary of baseline conditions in the Site Study Area (SSA), Local Study Area (LSA) and Regional Study Area (RSA) specific to conditions relevant to the effects being assessed in the EIS Addendum (Section 7.0)



MARATHON PALLADIUM PROJECT SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT

Previous Characterization of Existing Conditions
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2.0 PREVIOUS CHARACTERIZATION OF EXISTING CONDITIONS

The original socio-economic baseline report submitted by Stillwater Canada Incorporated and prepared by gck Consulting Ltd. was submitted in 2011. It described the existing conditions of the municipalities and First Nations communities within a 100 km commuting distance of the Project. Existing conditions were described for eight communities (five municipalities and three First Nations):

- Marathon
- Terrace Bay
- Manitouwadge
- Schreiber
- White River
- Pic River First Nation (now Biigtigong Nishnaabeg)
- Pic Moberg First Nation
- Pays Plat First Nation

For each of these communities, baseline information was provided on demographics, social factors (e.g., administration, population, housing, education, and health services and programs) and economic factors (e.g., labour force, labour participation and employment, income levels, and cost of living).

The 2011 socio-economic baseline report indicates that the populations of all municipalities in the RSA, with the exception of Schreiber, decreased between 2006 and 2011. Among the First Nations, Biigtigong Nishnaabeg (BN) and Pays Plat First Nation saw population increases between 2006 and 2011 while Pic Moberg First Nation's population decreased.

In general, municipal residents in the RSA perceive their quality of life to be excellent. The municipalities had modern telecommunications infrastructure, excellent health and social services and abounding recreational opportunities. The region was characterized by low crime rates and affordable housing.

Data collected for the three First Nations indicated low Community Well-Being (CWB) scores when compared to neighbouring municipalities. However, the CWB for BN, Pic Moberg First Nation, and Pays Plat First Nation were higher in 2011 than the average for First Nations. The First Nations in the RSA had been implementing economic development projects, including cable television and internet companies in Pic River, and capacity-building initiatives to improve their overall quality of life.



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Previous Characterization of Existing Conditions
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Information pertaining to land and resource use (LRU) was described directly within the original EIS, specifically Section 1.3.3.1 (Municipal Planning Perspective) and Section 1.4.2 (Project Setting). Based on the applicable planning policies under the *Planning Act* (1990) and general LRU activities described in the area, LRU in the area was described as being primarily focused on forestry, pulp and paper, mining, and tourism (including hunting and fishing).



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Regulatory Setting
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3.0 REGULATORY SETTING

The Project initially commenced in 2010 under the *Canadian Environmental Assessment Act* (CIAR# 1) and was referred to a review panel on October 7, 2010 (CIAR # 2). On July 6, 2012, the former *Canadian Environmental Assessment Act* was repealed by CEAA 2012. In accordance with subsection 126(1) of the new Act, existing projects were to proceed under the process established by CEAA 2012. The Project is being assessed in accordance with the *Canadian Environmental Assessment Act* (CEAA, 2012) and Ontario's EA Act through a Joint Review Panel (the Panel) pursuant to the *Canada-Ontario Agreement on Environmental Assessment Cooperation* (2004). As a result, there are no changes to the regulatory setting for the assessment of the Project on the socio-economic environment.



MARATHON PALLADIUM PROJECT SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT

Study Area
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4.0 STUDY AREA

For the purpose of this assessment, the spatial boundaries considered include the direct and indirect effects related to site preparation, construction, operation, and decommissioning / closure of the Project. These areas are generally consistent with the spatial boundaries used in the EIS (2012) and associated supporting information documents, with appropriate revisions / refinements and rationale provided below.

4.1 SITE STUDY AREA (SSA)

The Site Study Area (SSA) is the direct footprint of the Project. Based on refinements to the Project footprint, and in recognition of project components originally located outside of the SSA, a revised SSA has been developed that encompasses the immediate area in which Project activities and components may occur and, as such, represents the area within which direct physical disturbance may occur as a result of the Project, whether temporary or permanent. The SSA is consistent for all valued ecosystem components (VECs) as depicted on Figure 1 (Appendix A).

4.2 LOCAL STUDY AREA (LSA)

The Local Study Area (LSA) is the maximum area within which environmental effects from Project activities and components can be predicted or measured with a reasonable degree of accuracy and confidence. It consists of the SSA and adjacent areas where Project-related environmental effects are reasonably expected to occur based on available information and professional judgment.

The LSA for the socio-economic environment includes the area immediately surrounding the Project, including the Town of Marathon and BN, depicted on Figure 2 (Appendix A). The LSA used in this baseline report is consistent with the LSA used in the EIS and Supplemental Information Document #22.

A new LSA specific to the LRU component of the socio-economic environment includes the area immediately surrounding the Project and the LSA established in the baseline update report for wildlife (see Terrestrial Baseline Update Report, Northern BioScience, 2020), which is defined by adding a 1 km buffer to the SSA. The rationale for aligning the LRU and wildlife LSA, which also encompasses the Fish Habitat LSA (see Aquatics Baseline Update Report, Ecometrix, 2020), is based on potential interactions between Project related activities and nearby land uses by communities, focused on plant, fish and wildlife resources.



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Study Area
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4.3 REGIONAL STUDY AREA (RSA)

The Regional Study Area (RSA) is the area within which residual environmental effects from Project activities and components may interact cumulatively with the residual environmental effects of other past, present and future (i.e., certain or reasonably foreseeable) physical activities. The RSA is based on the potential for interactions between the Project and other existing or future potential projects.

The socio-economic assessment focuses on the people and communities who live in and make use of the area potentially affected by biophysical changes resulting from the Project. As such, the study areas are defined more broadly for the socio-economic assessment than the atmospheric, aquatic, and terrestrial assessments.

The RSA for the socio-economic environment includes communities within a 100 km travel distance of the Project, though regional economic benefits might be realized along the corridor between Wawa and Thunder Bay and is depicted on Figure 2 (Appendix A). The RSA used in this baseline report is consistent with the RSA used in the EIS and Supplemental Information Document #22.

A new RSA specific to the LRU component of the socio-economic environment is defined by a 35 km buffer added to the SSA, which was selected to capture the extent of potential cumulative effects on land and resource users in the area. This distance was considered more appropriate than the socio-economic RSA of 100 km to represent the area within which local recreational land users are likely to target when seeking fishing, hunting or other recreational use opportunities.



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Methodology
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5.0 METHODOLOGY

Given that socio-economic data are dynamic and change rapidly and the fact that it has been nearly 10 years since the collection of the data reported in SID #22, it was reasonable to review the entire 2011 document to determine if more current information existed. This report contains only information that has changed since the original EIS, supplemental information reports and IR responses were written.

In general, sources used for the compilation of SID #22 were revisited. These included internet sources, such as Statistics Canada, municipal websites, provincial agencies, school and health board websites, regional tourism development websites, as well as publicly-available information (i.e., maps, reports, studies, public databases, government data), other literature and EAs, and local news outlets. In addition, conversations were held with administrative staff at the Township of Marathon and BN and with other local authorities to update existing conditions of the socio-economic environment.

While this report describes the socio-economic environment of specific municipalities and indigenous communities, it is recognized that members of other indigenous groups, including Superior Northshore Metis (Metis Nation of Ontario), Red Sky Metis Independent Nation, and Ontario Coalition of Indigenous People (OCIP) reside in the LSA and RSA.



**MARATHON PALLADIUM PROJECT
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Updated Baseline Conditions
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6.0 UPDATED BASELINE CONDITIONS

6.1 POPULATION

The RSA encompasses the Town of Marathon, plus communities located within approximately one-hour commuting time (i.e. approximately 100 km). As summarized in Table 6.1, there are nine communities (data presented for Statistics Canada’s census subdivisions (CSDs)) within an hour’s commuting time to Marathon, and in 2016 the RSA had a total population of 9,380 persons (48.8% female; see Table 6.1). Persons of Indigenous identify³ accounted for 19.8% (1,855 persons) of the RSA population. Of the Indigenous population 52.8% were female.

In addition to the nine communities comprising the RSA, some of the residents living within the Thunder Bay Unorganized CSD are within commuting distance of Marathon. However, this is a large subdivision, and it is anticipated that most of its residents live beyond commuting range to Marathon.

Table 6.1: Regional RSA Communities

Community	Total Population			Indigenous ¹ Population			Distance to Marathon, Ont. (km)
	Total	Male	Female	Total	Male	Female	
Town of Marathon	3,275	1,675	1,600	410	190	220	-
Pic River 50 reserve lands	445	215	230	425	210	215	10
Pic Moberg North reserve lands	200	100	100	185	95	90	73
Pic Moberg South reserve lands	120	65	55	120	65	55	73
Terrace Bay Township	1,610	810	800	150	55	95	82
Schreiber Township	1,060	555	505	90	40	50	96
White River	645	340	305	175	65	110	96
Manitouwadge Township	1,935	990	945	215	105	110	99
Pays Plat IR 51	90	50	40	85	50	35	126
Total	9,380	4,800	4,580	1,855	875	980	-

³ *Indigenous* includes statistics for Aboriginal identity. Statistics Canada defines Aboriginal identity as persons who self-identify as being an Aboriginal person. This includes those who are First Nations (North American Indian), Métis or Inuk (Inuit) and/or those who are Registered or Treaty Indians (that is, registered under the *Indian Act* of Canada) and/or those who have membership in a First Nation or Indian band. Aboriginal peoples of Canada are defined in the Constitution Act, 1982, section 35 (2) as including the Indian, Inuit and Métis peoples of Canada.



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Table 6.1: Regional RSA Communities

Community	Total Population			Indigenous ¹ Population			Distance to Marathon, Ont. (km)
	Total	Male	Female	Total	Male	Female	
Notes:							
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size Total may not sum due to rounding. NA = not applicable 2011 'Total Population' data from 2011 Census of the Population – Census Profile. 2011 'Aboriginal Population' data taken from 2011 NHS – Aboriginal Profile. Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2011 and 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables Source: Statistics Canada 2012, 2013, 2014, 2017, 2018							

6.2 GENERAL LABOUR FORCE

6.2.1 General Labour Force Characteristics

The total population of the RSA in 2016 aged 15 years or over was 7,900 (Table 6.2). The labour force totalled 4,705 (49.2% female) persons representing a participation rate of 59.6%. The average unemployment rate for the RSA was 9.5%. The Town of Marathon accounted for the greatest percentage of the RSA workforce at 37.1% (1,745 persons; see Appendix B). The lowest unemployment rate was observed in White River (2.9%). Participation and unemployment rates were greatest in Pays Plat 51 IR at 64.3% and 44.4%, respectively. Persons of Indigenous identity accounted for 18.1% of the total labour force. The RSA Indigenous labour force had an average unemployment rate of 18.1%, 14.1 percentage points greater than the total RSA average. Labour force characteristics by RSA community, sex, and Indigeneity are presented in Appendix B.



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Table 6.2: RSA Labour Force Characteristics

Topic	Total Population			Indigenous ¹ Population		
	Total	Male	Female	Total	Male	Female
Population aged 15 years+	7,900	4,010	3,890	1,375	645	730
Labour force	4,705	2,510	2,195	850	415	435
Participation rate (%)	59.6	62.6	56.4	61.8	64.3	59.6
Employed	4,255	2,250	2,005	730	350	380
Unemployed	445	245	200	120	60	60
Unemployment rate (%)	9.5	9.8	9.1	14.1	14.5	13.8

Notes:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 Total may not sum due to rounding.
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables
 Source:
 Statistics Canada 2017, 2018

6.2.2 Labour Force by Sector

Table 6.3 provides a summary of employment by sector within the RSA in 2016. Overall, employment was greatest in the mining, quarrying, and oil and gas extraction sector (National Occupational Classification (NOC) 21) accounting for 14.8% of the labour force (690 persons), followed by retail trade (NOC 44-45; accounting for 12.4% of the labour force or 580 persons) and health care and social assistance (NOC 62; accounting for 11.1% of the labour force or 515 persons). Compared to provincial averages, a notably greater percentage of the RSA labour force is employed in the mining, quarrying and oil and gas extraction sector (approximately 30 times more on a per-capita basis [14.8% vs. 0.5%]) while a similar percentage of the labour force is employed in the retail trade (12.4% vs. 11.0%) and health care and social assistance (11.1% vs. 10.6%) sectors.

Among the Indigenous RSA labour force, employment was greatest in retail trade (NOC 62) and public administration (NOC 91) with each accounting for 12.7% of the labour force (employing 110 persons each). This was closely followed by health care and social assistance with accounted for 12.1% of the labour force (105 persons). The most noticeable difference in Indigenous employment within the RSA to that of the Province is observed in the mining, quarrying, and oil and gas extraction sectors where employment is six times greater than the provincial average (10.4% vs. 1.7%).

There are no oil and gas operations identified in the RSA. Therefore, it is assumed that in 2016, mining and quarrying industries employed 690 persons. Employment data by sector, community, sex, and Indigeneity are presented in Appendix B.



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Table 6.3: Employment by Sector, 2016

NIACS	Sector	Total Labour Force				Indigenous ¹ Labour Force			
		RSA		Ontario		RSA		Ontario	
		Persons	%	Persons	%	Persons	%	Persons	%
11	Agriculture, forestry, fishing and hunting	150	3.2	102,075	1.4	40	4.6	2,220	1.3
21	Mining, quarrying, and oil and gas extraction	690	14.8	32,335	0.5	90	10.4	2,920	1.7
22	Utilities	40	0.9	50,825	0.7	20	2.3	1,675	1.0
23	Construction	220	4.7	476,830	6.7	65	7.5	14,160	8.0
31-33	Manufacturing	445	9.5	683,330	9.6	50	5.8	13,175	7.5
41	Wholesale trade	65	1.4	270,745	3.8	10	1.2	4,045	2.3
44-45	Retail trade	580	12.4	783,540	11.0	110	12.7	20,015	11.4
48-49	Transportation and warehousing	250	5.4	329,235	4.6	45	5.2	7,610	4.3
51	Information and cultural industries	35	0.8	176,715	2.5	10	1.2	2,665	1.5
52	Finance and insurance	80	1.7	380,770	5.3	20	2.3	3,790	2.2
53	Real estate and rental and leasing	30	0.6	144,275	2.0	10	1.2	2,085	1.2
54	Professional, scientific and technical services	50	1.1	567,825	8.0	0	0.0	6,640	3.8
55	Management of companies and enterprises	10	0.2	12,365	0.2	0	0.0	110	0.1
56	Administrative and support, waste management and remediation services	90	1.9	338,640	4.7	40	4.6	9,300	5.3
61	Educational services	450	9.7	528,475	7.4	35	4.0	11,675	6.6
62	Health care and social assistance	515	11.1	754,545	10.6	105	12.1	23,270	13.2
71	Arts, entertainment and recreation	75	1.6	147,425	2.1	20	2.3	4,280	2.4
72	Accommodation and food services	315	6.8	478,065	6.7	55	6.4	15,120	8.6
81	Other services (except public administration)	155	3.3	296,965	4.2	20	2.3	7,125	4.0
91	Public administration	365	7.8	415,635	5.8	110	12.7	16,460	9.3
Not classified under North American Industry Classification System (NAICS)		50	1.1	171,045	2.4	10	1.2	7,810	4.4



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Table 6.3: Employment by Sector, 2016

NIACS	Sector	Total Labour Force				Indigenous ¹ Labour Force			
		RSA		Ontario		RSA		Ontario	
		Persons	%	Persons	%	Persons	%	Persons	%
Total		4,660	100.0	7,141,660	100.0	865	100.0	176,150	100.0
Notes: ¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size Total may not sum due to rounding. Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables Source: Statistics Canada 2017, 2018									

6.2.3 Labour Force by Broad Occupational Category

Table 6.4 provides a summary of RSA employment by broad occupational category. Overall, sales and service occupations (NOC 6) accounted for the greatest percentage of the labour force employment (21.4% of the labour force or 1,015 persons) followed by trades, transport and equipment operators (NOC 7; 19.7% of the labour force or 935 persons) and occupations in education, law and social, community and government services (NOC 4; 12.3% of the labour force or 585 persons). Of the top three occupations in the RSA, a notably (more than five percentage points) greater percentage of the labour force than the provincial average was employed in trades, transport and equipment operation occupations (19.7% vs. 13.0%) while employment in sales and service (21.4% vs. 22.9%) and education, law and social, community and government services (12.3% vs. 11.6%) were more closely aligned with provincial averages.

Among the Indigenous RSA labour force, trades, transport and equipment operators (NOC 7; 22.7% of the labour force or 195 persons) accounted for the greatest percentage of the labour force followed by sales and service occupations (NOC 6; 19.2% of the labour force or 165 persons) and occupations in education, law and social, community and government services (NOC 4; 13.4% of the labour force or 115 persons). Of the top three occupations among the RSA Indigenous labour force, a notably greater percentage was employed in trades, transport and equipment operation occupations than the provincial Indigenous average (19.7% vs. 13.0%) and notably fewer in sales and service occupations (19.2% vs. 26.0%). Employment in education, law and social, community and government service occupations (13.4% vs. 13.3%) more closely aligned with provincial averages.

Employment data by broad occupational category, community, sex, and Indigeneity are presented in Appendix B.



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Table 6.4: Employment by Broad Occupational Category, 2016

NOC	Broad Occupational Category	Total Labour Force				Indigenous ¹ Labour Force			
		RSA		Ontario		RSA		Ontario	
		Persons	%	Persons	%	Persons	%	Persons	%
0	Management	445	9.4	790,875	11.1	45	5.2	13,315	7.6%
1	Business, finance and administration	490	10.3	1,124,770	15.7	85	9.9	22,830	13.0%
2	Natural and applied sciences and related	205	4.3	516,110	7.2	10	1.2	6,450	3.7%
3	Health	240	5.1	447,045	6.3	45	5.2	10,085	5.7%
4	Education, law and social, community and government services	585	12.3	831,340	11.6	115	13.4	23,450	13.3%
5	Art, culture, recreation and sport	55	1.2	225,720	3.2	20	2.3	4,310	2.4%
6	Sales and service	1015	21.4	1,632,085	22.9	165	19.2	45,850	26.0%
7	Trades, transport and equipment operators and related	935	19.7	927,820	13.0	195	22.7	28,685	16.3%
8	Natural resources, agriculture and related production	430	9.1	113,410	1.6	100	11.6	4,755	2.7%
9	Manufacturing and utilities	255	5.4	361,455	5.1	30	3.5	8,605	4.9%
Not included in standard NOC classification		95	2.0	171,050	2.4	50	5.8	7,810	4.4
Total		4,750	100.0	7,141,680	100.0	860	100.0	176,145	100.0

Notes:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
Total may not sum due to rounding.
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables
Source:
Statistics Canada 2017, 2018



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6.2.4 Educational Attainment

Educational attainment is summarized in Table 6.5. As of 2016, 50.6% of the total RSA population and 42.6% of the Indigenous RSA population had completed post-secondary (i.e., greater than secondary [high school]) education. Across the RSA, males accounted for the greatest percentage of the population (79.0%) with an apprenticeship, trades certificate, or diploma. This is more pronounced among the Indigenous population where 92.6% of the population with an apprenticeship, trades certificate or diploma were male. Females generally accounted for a greater proportion of all other forms of post-secondary education (the exception being Indigenous persons holding a university certificate or diploma below bachelor level where educational attainment was equal among males and females). Levels of educational attainment are similar in the RSA to those seen across the province.

Information on educational attainment by RSA community, sex, and Indigeneity are presented in Appendix B.

Table 6.5: Educational Attainment, 2016

Topic	Total Population				Indigenous ¹ Population			
	Total		Male (%)	Female (%)	Total		Male (%)	Female (%)
	Number	%			Number	%		
RSA								
No certificate, diploma or degree	1,845	23.4	51.2	48.8	470	33.9	47.9	52.1
Secondary (high) school diploma or equivalency certificate	2,040	25.9	47.3	52.7	325	23.5	52.3	47.7
Apprenticeship or trades certificate or diploma	1,120	14.2	79.0	21.0	135	9.7	92.6	7.4
College, CEGEP or other non-university certificate or diploma	1,965	25.0	43.5	56.5	355	25.6	33.8	66.2
University certificate or diploma below bachelor level	105	1.3	28.6	71.4	40	2.9	50.0	50.0
University certificate, diploma or degree at bachelor level or above	795	10.1	40.3	59.7	60	4.3	33.3	66.7
Total	7,870	100.0			1,385	100.0		
Ontario								
No certificate, diploma or degree	1,935,360	17.5	49.7	50.3	82,800	29.1	51.6	48.4



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Table 6.5: Educational Attainment, 2016

Topic	Total Population				Indigenous ¹ Population			
	Total		Male (%)	Female (%)	Total		Male (%)	Female (%)
	Number	%			Number	%		
Secondary (high) school diploma or equivalency certificate	3,026,090	27.4	49.1	50.9	78,585	27.6	49.0	51.0
Apprenticeship or trades certificate or diploma	664,175	6.0	70.9	29.1	22,130	7.8	71.5	28.5
College, CEGEP or other non-university certificate or diploma	2,298,715	20.8	42.7	57.3	68,150	23.9	37.5	62.5
University certificate or diploma below bachelor level	242,010	2.2	44.2	55.8	4,535	1.6	36.2	63.8
University certificate, diploma or degree at bachelor level or above	2,872,095	26.0	46.5	53.5	28,660	10.1	35.6	64.4
Total	11,038,445	100.0			284,860	100.0		

Notes:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 Total may not sum due to rounding.
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables.
 Data is presented for persons aged 15 years and older (aligns with statistics on labour force status).
 Sources:
 Statistics Canada 2017, 2018

6.2.5 Individual Income

Table 6.6 provides information on total and employment incomes for individuals within the RSA. Total income represents the sum of regular and recurring monetary receipts from part-time and full-time employment income, income from investment sources, income from employer and personal pension sources, other regular cash income (e.g., child support payments and spousal support payments), and income from government sources (e.g., social assistance). Employment income is the sum of wages, salaries, tips, commissions, and net income from self-employment. In 2015, total and employment incomes earned by RSA males (total and Indigenous populations) were greater than provincial averages while incomes earned by RSA females were generally less than provincial averages (the exception being median total incomes earned by Indigenous females).

Individual income data by RSA community, sex, and Indigeneity are presented in Appendix B.



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Table 6.6: Individual Income (Annual – Before Tax), 2015

Topic		Total Income			Indigenous Population ¹		
		Total	Male	Female	Total	Male	Female
RSA							
Total Income	Median	39,112	53,361	28,892	31,960	40,003	22,460
	Mean	63,919	87,353	39,906	44,621	56,803	30,981
Employment Income	Median	34,270	48,145	24,725	27,906	43,276	19,721
	Mean	54,721	72,644	34,183	41,242	53,099	27,208
Ontario							
Total Income	Median	42,717	54,891	33,213	29,522	37,491	25,357
	Mean	62,778	80,001	45,535	44,232	54,259	35,378
Employment Income	Median	42,679	54,361	32,982	32,598	41,625	26,273
	Mean	59,343	74,073	43,031	45,462	56,083	35,008
<p>NOTES:</p> <p>¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size</p> <p>Total income is presented for persons aged 15 years and older and is the sum of regular and recurring monetary receipts from part-time and full-time employment income (e.g., wages, tips, and commissions), income from investment sources (e.g., dividends, guaranteed investment certificates, and mutual funds), income from employer and personal pension sources (e.g., private pensions and payments from annuities and registered retirement income funds), other regular cash income (e.g., child support payments and spousal support payments), and income from government sources (e.g., social assistance, Employment Insurance benefits, Old Age Security benefits, and Canada Pension Plan benefits and disability income).</p> <p>Employment income is the sum of wages, salaries, tips, commissions, and net income from self-employment.</p> <p>Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables</p> <p>SOURCE: Statistics Canada 2017, 2018</p>							

6.3 MINING LABOUR FORCE

6.3.1 Mining Labour Force Characteristics

Statistics Canada does not publish employment information at the industry group (four-digit NAICS code) for CSDs (i.e., administrative boundaries used to define the RSA); only provincial- and territorial-level data are publicly available. Estimates of 2016 labour force employment within the RSA for industry groups 2121, 2122, 2123, 2131, 3311, 3313, 3314, and 5413 are estimated in Table 6.7 by applying total sector-based employment (Table 6.3) to industry group provincial employment averages.



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According to the Mining Industry Human Resources Council (MiHR), the following NAICS industries are the most relevant to Canada's mining sector:- NAICS 2121 coal mining, NAICS 2122 metal ore mining, and NAICS 2123 non-metallic mineral mining and quarrying; support services - NAICS 2131 support activities for mining and oil and gas extraction; fabrication and manufacturing NAICS 3311 Iron and steel mills and ferro-alloy manufacturing, NAICS 3313 alumina and aluminum production and processing, and NAICS 3314 Non-ferrous metal (except aluminum) production and processing; and, mineral exploration - NAICS 5413 Architectural, engineering and related services (MiHR 2015).



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Table 6.7: Employment By Industry Group (Four-Digit NAICS Code) Most Relevant to Canadian Mining Sector, RSA and Ontario (2016)

Location	All Sectors and Industries																		
	21 Mining, quarrying, and oil and gas extraction						31-33 Manufacturing					54 Professional, scientific, and technical services			Other Sectors and Industries	Total			
	Industry Groups					Total	Industry Groups				Total	Industry Groups		Total					
	2121	2122	2123	21311B	Other industries under sector 21		Subtotal	3311	3313	3314		Other industries under sector 31-33	Subtotal		5413	Other industries under sector 54	Subtotal		
2016 Labour Force Composition, percent																			
RSA ¹	0.0%	52.4%	20.6%	24.7%	2.4%	100.0%	14.8%	2.1%	0.4%	0.7%	96.8%	100.0%	9.5%	14.6%	85.4%	100.0%	1.1%	74.6%	100.0%
Ontario							0.5%						9.6%				8.0%	81.9%	100.0%
2016 Labour Force by Select Industry Group, persons																			
RSA ¹	0	362	142	170	17	690	9	2	3	431	445	7	43	50	3,475	4,660			
Ontario	0	14,910	5,870	7,025	670	28,475	14,505	2,725	4,790	668,730	690,720	74,620	436,495	511,115	5,908,195	7,138,505			
Notes:																			
NAICS Industries are as follows: 2121 – Coal Mining; 2122 – Metal Ore Mining; 2123 – Non-Metallic mineral mining and quarrying; 3311 – Iron and steel mills and ferro-alloy manufacturing; 3313 Alumina and aluminum production and processing; 3314 – Non-ferrous metal (except aluminum) production and processing; 56413 – Architectural, engineering and relates services.																			
1. Estimated assuming similar sectoral (NAICS 21, 31-33, and 54) industry group percent composition (in terms of employment) as provincial average.																			
Source:																			
Table 3-2 (Statistics Canada 2017), Statistics Canada 2020a																			



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In addition to industries, MiHR recognizes 70 NOC codes (at the four-digit or unit group level) that are essential to Canada’s mining sector (MiHR 2015). MiHR categorizes these 70-unit groups into six categories: trades and production occupations; professional and physical science occupations; human resources and financial occupations; support workers; technical occupations; and supervisors, coordinators and foremen. On average, these categories respectively account for 60.5%, 10.4%, 5.0%, 6.0%, 7.3%, and 10.8% of the Canadian mining sector workforce (see Table 6.8).

As with industry employment data, Statistics Canada does not publish occupational employment information at the unit group level for CSDs; only provincial- and territorial-level data are publicly available. Estimates of 2016 labour force employment within the RSA for unit groups are provided having applied broad occupational category employment (Table 6.8) to unit group provincial employment averages (see Appendix B for detailed unit group estimates). In total, in 2016 there were an estimated 862 persons employed in mining-related occupations.

Table 6.8: Average Composition of Mine Workforces in Canada, by Broad Occupational Category

Category	NOC Code and Broad Occupational Category	Average composition of Canadian mining sector workforce	2016 Employment	
			Ontario	RSA ¹
Trades and production occupations	NOC 7 – Trades, transport and equipment operators and related occupation. Unit groups: 7237, 7242, 7251, 7252, 7271, 7311, 7312, 7371, 7372, 7452, 7511, 7521, 7611, 7612.	38.9%	438,605	442
	NOC 8 – Natural resources, agriculture and related production occupations. Unit groups: 8231, 8411, 8614.	13.0%	7,905	30
	NOC 9 – Occupations in manufacturing and utilities. Unit groups: 9231, 9241, 9411, 9611	8.6%	16,805	12
	Subtotal	60.5%	463,315	484
Professional and physical science occupations	NOC 2 – Natural and applied sciences and related occupations. Unit groups: 2112, 2113, 2115, 2121, 2131, 2132, 2133, 2134, 2141, 2142, 2143, 2144, 2148.	10.4%	98,240	61
	Subtotal	10.4%	98,240	61
Human resources and financial occupations	NOC 0 – Management occupations. Unit groups: 0111, 0112.	1.9%	54,020	30
	NOC 1 – Business, finance and administration occupations. Unit groups: 1111, 1112, 1121.	3.1%	133,950	58
	Subtotal	5.0%	187,970	89
Support workers	NOC 1 – Business, finance and administration occupations. Unit groups: 1241, 1414, 1523, 1525, 1526.	2.6%	161,545	70



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Table 6.8: Average Composition of Mine Workforces in Canada, by Broad Occupational Category

Category	NOC Code and Broad Occupational Category	Average composition of Canadian mining sector workforce	2016 Employment	
			Ontario	RSA ¹
	NOC 2 – natural and applied science and related occupations. Unit groups: 2234, 2261, 2262, 2263.	2.4%	21,655	9
	NOC 6 – Sales and service occupations. Unit group 6322.	0.4%	72,085	45
	NOC 9 – Occupations in manufacturing and utilities. Unit group 9415.	0.6%	1,340	1
	Subtotal	6.0%	256,625	125
Technical Occupations	NOC 2 – natural and applied science and related occupations. Unit groups: 2154, 2171, 2211, 2212, 2221, 2231, 2232, 2233, 2241, 2243 2253, 2254, 2255.	7.3%	154,790	61
	Subtotal	7.3%	154,790	61
Supervisors, coordinators, and foremen	NOC 0 – Management occupations. Unit groups: 0211, 0711, 0811.	5.3%	40,590	23
	NOC 7 – Trades, transport and equipment operators and related occupations. Unit groups: 7203,7301.	0.5%	9,175	9
	NOC 8 – Natural resources, agriculture and related production occupations. Unit group 8221.	3.0%	2,055	8
	NOC 9 – Occupations in manufacturing and utilities. Unit group 9211.	2.0%	2,960	2
	Subtotal	10.8%	54,780	42
Total		100.0%	1,215,720	862
Notes:				
1. Estimated assuming similar broad occupational category (NOC 0, 1, 2, 6, 7, 8, 9) unit group (e.g., NOC 7237) percent composition (in terms of employment) as provincial average.				
Source:				
MiHR 2015, Table 3-3 (Statistics Canada 2017), Statistics Canada 2019b				



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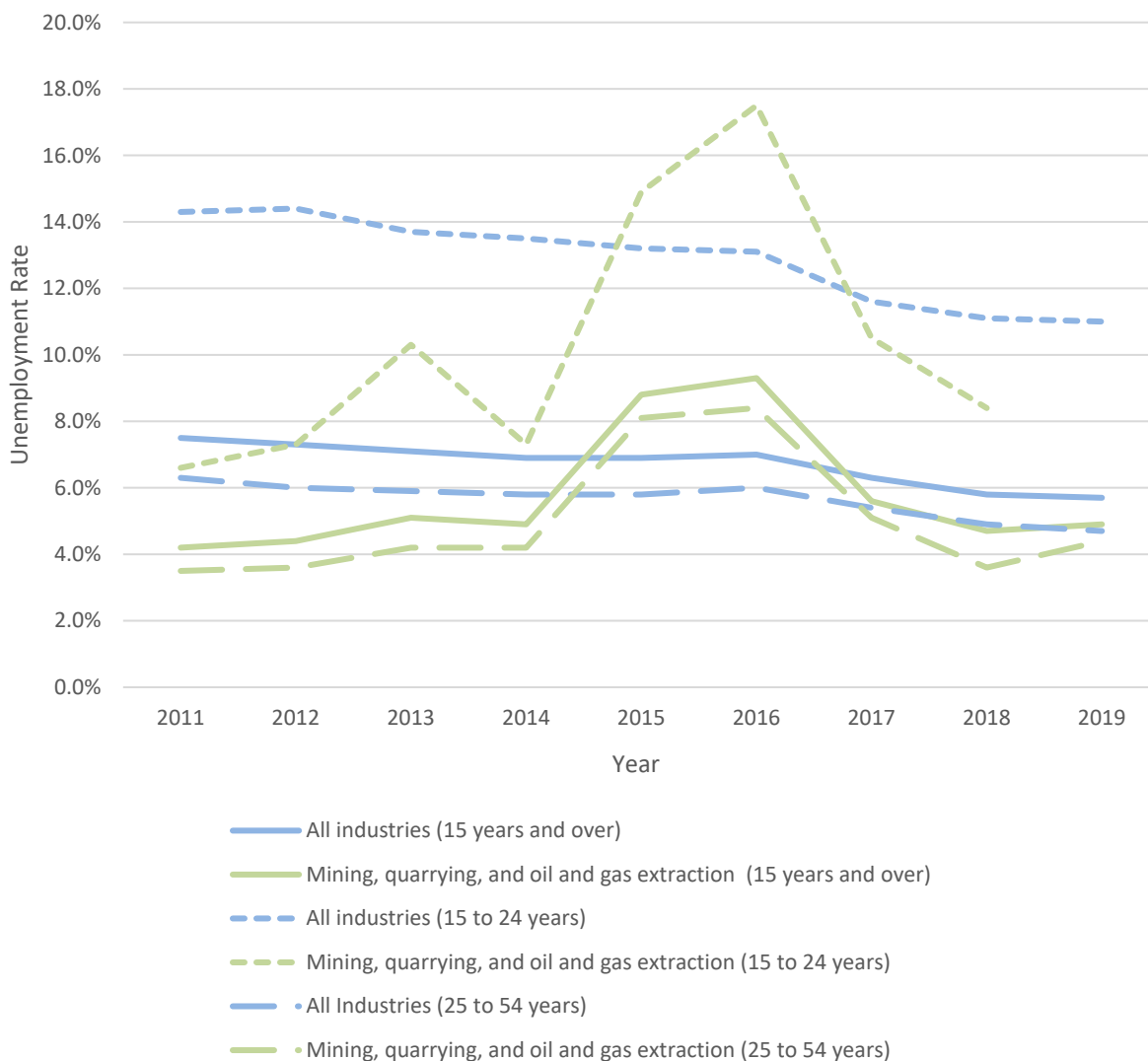
6.3.2 Unemployment Rate in the Mining Sector

The mining sector tends to have a lower unemployment rate than other industries in Canada, though it experiences greater volatility in labour demand (see Graph 6.1) (Statistics Canada 2020b). In 2019, the labour force unemployment rate in mining was 4.7%, compared to 5.8% for all industries. In the same year, the unemployment rate for 15 to 24 year olds employed in mining was approximately 8.4%, compared to 11.1% for all industries while the unemployment rate for 25 to 54 year olds employed in mining was 3.6% compared to 4.9% for all industries. Similar trends are observed in Ontario (see Graph 6.2).



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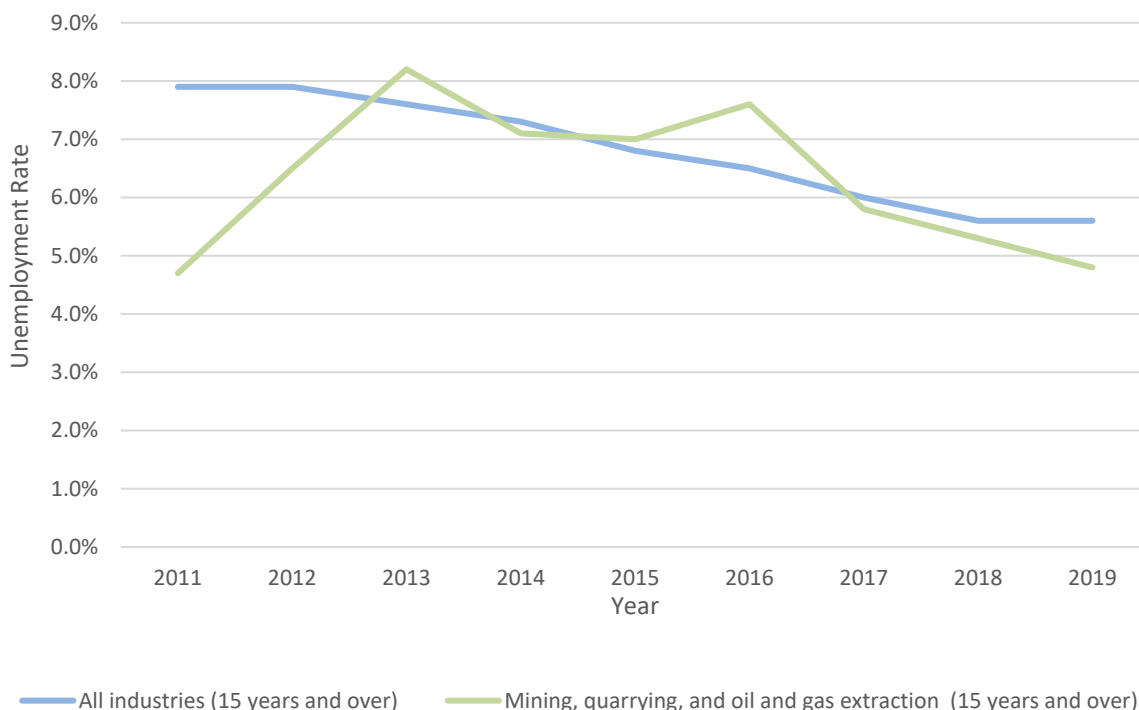
Source: Statistics Canada 2020b

Graph 6.1: Unemployment Rates for Select Sectors (2011-2019) by Age Cohort, Canada



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SOURCE: Statistics Canada 2020b

Graph 6.2: Unemployment Rates for Select Sectors (2011-2019) for the Total Labour Force, Ontario

6.3.3 Worker Mobility in Mining Sector

Overall, 69.8% of the labour force resident to the RSA live and commute to workplaces within their home communities (see Table 6.9). Just under one quarter (24.2%) of the resident labour force commute to destinations outside home communities but within the region (i.e., the District of Thunder Bay). Only 4.6% of the resident labour force commute to destinations in communities outside the region but still within Ontario and only 1.3% of the labour force commute to other provinces and territories.

While information on the community destination of the RSA resident labour force is not available by industry or occupation, MiHR notes that compared to other economic sectors, the mining industry across Canada employs a large proportion of non-resident workers for their operations (2015). However, in Ontario a large proportion of workers in the mining industry are Ontario residents, with less than 5% of workers being residents of other provinces (MiHR 2015).



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It is anticipated that a large proportion of the mining workforce that reside within the RSA either work within or near their home communities or within the region. However, it is possible that some residents within the RSA involved in mining operations are involved in projects elsewhere in Ontario or in other parts of Canada.

Table 6.9: Community Destination of the Resident RSA Labour Force, 2016

Community	Commuting Destination				Total
	Within home community	Different community within the same region	Different community in a different region	Other province or territory	
Marathon	76.6%	16.8%	5.5%	1.0%	100.0%
Manitouwadge Township	69.0%	25.6%	3.9%	1.6%	100.0%
Schreiber Township	48.3%	46.0%	3.4%	2.3%	100.0%
Terrace Bay Township	80.5%	19.5%	0.0%	0.0%	100.0%
Pays Plat 51 IR	0.0%	50.0%	25.0%	25.0%	100.0%
Pic Moberth North IR	42.9%	57.1%	0.0%	0.0%	100.0%
Pic Moberth South IR	28.6%	71.4%	0.0%	0.0%	100.0%
Pic River 50 IR	51.7%	48.3%	0.0%	0.0%	100.0%
White River	78.3%	10.0%	13.3%	0.0%	100.0%
Total	69.8%	24.2%	4.6%	1.3%	100.0%

Notes:
Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not sum across tables.

Source:
Statistics Canada 2017

6.3.4 Regional Trends in Mining Labour Demand

Riverlight Consulting Inc. (RLC) identifies seven active mines in northwestern Ontario and nine advanced exploration projects (2019). Of active mines and development projects, the Hemlo Mine, sited approximately 40 km east of Marathon, and the Sugar Zone mine, located 20 km east of White River, are within commuting distance of communities within the RSA.

In addition to operating mines, development projects in northwestern Ontario are anticipated to require substantial construction and operational workforces. RLC estimates that mine construction will employ an average of 582 persons per year, from 2019 to 2030, while mine operations will employ an average of 2,162 persons per year over the same period (2019). Some of the trends affecting the supply and demand for mining labour in northwestern Ontario include:

- Tight labour market – mining companies having difficulty attracting and retaining qualified staff



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- Mobile workforce – mining workers seeking employment outside of northwestern Ontario
- Aging workforce – by 2027 an estimated 25% of the industry's current workforce are set to retire
- Demographic participation – women are under-represented in the mining industry, accounting for 17% of the total workforce, mainly in clerical and corporate services roles (RLC 2019).

6.3.5 Marathon Region Mining Activity

Operated by Barrick Gold Corp., the Hemlo Mine is one of the largest gold mines in Canada. Operating since 1985, two of the mines three sites (David Bell and Golden Giant) have been decommissioned, with the Williams open pit and underground sites remaining in production. Until recently, the mine employed approximately 700 employees, drawn from neighbouring communities, including Marathon, Manitouwadge, White River, Biigtigong Nishnaabeg First Nation and Pic Mobert First Nation (RPA 2017). Hemlo is run on a “local operated” basis with its workforce drawn from local communities rather than commuting from outside the region. In 2017, the average age of the workforce was 46 years with annual turnover of 8.5%, primarily due to voluntary retirement (RPA 2017). The average age of the Hemlo workforce in November 2019 was reported to be 57 (McGee 2019).

Barrick is repositioning Hemlo as a non-critical asset producing less than 500koz of gold per year, closing its open pit operation, while extending the life of its underground operations (Barrick 2019). Barrick was expected to lay off 61 persons in the fall of 2020 (many were expected to take voluntary retirement) with a further 150 persons to be laid off before the end of 2020 (McGee 2020). In March 2020, Barrick has contracted Barminco to provide underground mining services at the Hemlo site. Barminco has indicated that it will employ more than 300 people at the Hemlo site (Gleeson 2020) with a number of these positions being expatriate development miners and supervision from non-Canadian origin.

While layoffs from the Hemlo operation may free up mining labour for other projects, considering the reported average age of the Hemlo workforce, it is possible that many of those who were laid off will choose to retire. Assuming that 300 to 350 persons remain employed at Hemlo's underground operation, and 150 to 200 persons retire, is estimated that approximately 200 persons in mining occupations within the RSA may be available to work on other projects in the near future.

Harte Gold Corp's Sugar Zone Mine commenced operations in 2019. It is an underground gold mine, employing an estimated 230 persons on an owner-operator operation. The Sugar Zone Mine provides worker accommodations in a camp facility based in White River with a 30-minute commute to and from the mine site on a daily basis. Operations at the Sugar Zone mine were temporarily suspended in March 2020 as a safety response to the COVID-19 pandemic; Harte Gold resumed mining operations in July 2020 and plant operations in August 2020.



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6.3.6 Biigtigong Nishnaabeg – Economic Development

Biigtigong Nishnaabeg provided GenPGM with updated information on select corporations and businesses as well as economic partnerships and development projects currently underway. Table 6.10 provides a summary of this information.

Table 6.10: Summary of Economic Development Information Provided by Biigtigong Nishnaabeg

Name	Description
Business Venture/Corporation	
Pic River Development Corporation	<ul style="list-style-type: none"> Operates the cable television and high-speed internet distribution company as well as IT services for the First Nation. Manages a labour services contract which employs workers and apprentices in various mining positions at Hemlo. Provides bussing transportation services for elementary and high school students. Two new buses were purchased in 2019. Contractor for the weekly domestic waste pick up for Biigtigong Nishnaabeg and Heron Bay North residents and the janitorial services for all Biigtigong Nishnaabeg public buildings.
Biigtigong Dbenjgan	<ul style="list-style-type: none"> Dbenjgan is a Biigtigong Nishnaabeg business created through the merger of the forestry and energy sections of Biigtigong (which also includes Mkwa Construction). The business seeks to build economic opportunities in the mining, forestry and construction sectors through labour contracts, contracting, construction and procurement with industry partners and works to increase the capacity of skills training and development.
Partnerships	
Bamkushwada Limited Partnership (BLP)	<ul style="list-style-type: none"> First Nation economic consortium representing First Nations along the East-West Tie Line Transmission Project route from Thunder Bay to Wawa. Following completion of the transmission project, BLP will acquire a 20% equity stake in the transmission project.
Supercom Industries LP (Supercom)	<ul style="list-style-type: none"> A 100% First Nation owned business composed of six First Nations – Fort William First Nation, Red Rock Indian Band, Pays Plat First Nation, Biigtigong Nishnaabeg, Pic Moberg First Nation and Michipicoten First Nation. The business is working with NextBridge Infrastructure and Valard to develop the East-West Tie Line Project.
Partnership with Pic Moberg and Morris Group	<ul style="list-style-type: none"> Partnership established the GMS Camps and Catering Limited Partnership to cater to development demands along the north shore of Lake Superior.
Umata Falls - partnership with Innergex	<ul style="list-style-type: none"> Commissioned in November 2008, this hydro development has a nameplate capacity of 23.0 MW with an average yearly energy output of 109,102 MWh.
Wawatay Falls – partnership with Sunridge Power	<ul style="list-style-type: none"> Commissioned in 1991, this run of the river type hydro station has a capacity of 13.5 MW.
Twin Falls	<ul style="list-style-type: none"> Acquired by Biigtigong Nishnaabeg in 2009, this 5 MW hydro development is located on the Kagiano River.
Manitou Falls and High Falls	<ul style="list-style-type: none"> This two-part hydro project is fully owned and controlled by Biigtigong Nishnaabeg and has a capacity of 6 MW.



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Table 6.10: Summary of Economic Development Information Provided by Biigtigong Nishnaabeg

Name	Description
Development Projects	
<ul style="list-style-type: none"> • Biigtigong Nishnaabeg hosts a Summer Student Employment Program that facilitates the training and capacity building of high school and post-secondary students in developing skills and gaining experience required to continue post-secondary studies and secure careers. • Biigtigong Nishnaabeg is exploring business opportunities to provide aggregate for industry and government work to support road construction and maintenance activities in the region. • Biigtigong Nishnaabeg is completing a feasibility study on Aquaculture that will see the potential development and operation of open water net pen aquaculture activities in Lake Superior. • Biigtigong Nishnaabeg is in the process of launching an online store (Gchi-Waaswaaganing) that will showcase and provide entrepreneurial opportunities to local artisans on a global scale. • Biigtigong Nishnaabeg is in the process of developing an updated Labour Market survey. Information obtained through the survey will be used to develop a skills inventory data system that will be used to help align the BN workforce with the training and educational requirements of careers in the region. 	
Source: BN 2020	

6.4 INFRASTRUCTURE AND SERVICES

6.4.1 Administration

Within the RSA, municipalities are governed by municipal councils and a Mayor. The First Nations are governed by a Chief and Council. BN, currently elects a Chief and Council to office by the provisions outlined in the Indian Act and is currently working on a customized election code that will align with their Chi-Naaknigewin (Constitution) and will allow for the community to achieve their vision of governance. Daily operations and administration of the community are managed by the Senior Management team that consists of seven department directors and one band administrator (BN 2020).



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Table 6.11 is an updated listing of staff and administrative positions for each community in the RSA.

Table 6.11: Administration Staff, RSA Communities

Community	Contact	Title
Biigtigong Nishnaabeg	Duncan Malcolm Michano	Chief
	Kimberly McWatch	Executive Assistant and Communications Officer
	Juanita Starr	Director Sustainable Development
	Joanne Michano	Band Administrator
	Debi Bouchie	Director, Operations
	Ken Ogima	Director, Dbenjigan
	Erica Perkins	Director, Health and Social Services
	Daniel Michano	Director, Capital Housing
	Elaine Stewart	Director, Finance
	Lisa Michano Courchene	Director, Education
	Economic Development Officer	Economic Development Officer
Pic Mobert First Nation	Johanna Desmoulin	Chief
	Stan Sabourin	Education Manager
	Jesse Gaudette	Lands & Resources Manager
	Shawn Desmoulin	Housing Manager
	Rosalind Andrews	Health and Social Manager
	Karen Madigan	Chief Financial Officer
	Joe Moses	Economic Development Officer
	Chris Bananish	Water Treatment Operator
Marathon	Rick Dumas	Mayor
	Daryl Skworchinski	CAO/Clerk
	Chuck Verbo	Finance and Administration Manager/Treasurer
	Brian Hyshka	Works, Operations, Facilities, and Parks Manager
	Serena Goodchild	Community Services and Economic Development Manager
	Earl Grigg	Fire Chief
	Andrea Gauthier	Corporate Services Manager
Terrace Bay	Jody Davis	Mayor
	Jonathan Hall	CAO/Clerk
	Dan Mulligan	Treasurer/Deputy Clerk
	Terry Hanley	Public Works Superintendent
	Moe Stark	Fire Chief
	Dean Main	Community Development Supervisor



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Table 6.11: Administration Staff, RSA Communities

Community	Contact	Title
Manitouwadge	John MacEachern	Mayor
	Margaret Hartling	CAO/ Clerk-Treasurer
	Owen Cranney	Chief Building Official; Fire Chief
	Terry Bangs	Public Works Superintendent
	Dave Raymond	Director of Community Services; Economic Development Officer
Schreiber	Dave Hamilton	Mayor
	Nathan Dias	CAO/Clerk
	Marlene Bottomley	Treasurer/Deputy Clerk
	Mitchell G. Fairservice	Director of Operations
	Dominique Charbonneau	Economic Development Coordinator
	Jan Morrison	Fire Chief
	Evan Cole	Recreation Programmer
White River	Angelo Bazzoni	Mayor
	Tina Forsyth	CAO/Treasurer
	Brandi Greenwood	Festival Coordinator
	Craig Sanders	Water/Sewer Department
	Ronald St. Louis/Darryl Godin	Public Works Department
	Ted Greenwood	Fire Chief
Pays Plat First Nation	David Peter Mushquash	Chief
	John Szura	Chief Executive Officer

6.4.2 Housing

Table 6.12 presents housing characteristics information for each community in the RSA for 2006 and 2016. In 2016, there were a total of 4,916 private dwellings in the RSA. The number of private dwellings decreased in all communities in the RSA, except Schreiber, which saw an increase of 5.7% (Statistics Canada 2017). Between 2006 and 2016, the average value of a home in the RSA increased between 1.4% (White River) and 69.4% (Schreiber) while it decreased by 19.0% in Manitouwadge. In 2016, housing prices ranged from \$72,593 (Manitouwadge) to \$98,686 (Marathon) (Statistics Canada 2017).



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Results of the most recent rural rental market survey, completed in 2015, show that vacancy rates for rental properties in Marathon were between 1.7% and 3.8% for apartments and row houses (CMHC 2018; Zakher, pers. comm., 2020). The average monthly rent in the RSA in 2016 ranged from \$603 (Schreiber) to \$746 (Marathon) (Statistics Canada 2017). Vacancy rates for owned homes and rented accommodations in the RSA are currently very low as a result of other resource projects in the area. Marathon, for instance has a vacancy rate near 0% and municipal authorities foresee the need for an additional subdivision to be built in the near future should other projects occur in the area (Skworchinski, pers. comm., 2020).



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Table 6.12: Housing Characteristics, RSA, 2006 and 2016

	Marathon			Terrace Bay			Manitouwadge			Schreiber		
	2006	2016	% change	2006	2016	% change	2006	2016	% change	2006	2016	% change
Total private dwellings	1,678	1,643	-2.1	838	821	-2	1,212	1,082	-10.7%	594	628	5.7%
Occupied private dwellings	1,490	1,445	-3.0	690	745	8	955	895	-6.3%	400	500	25.0%
Single detached houses (%)	78.9	74	-5.7	89.9	86.6	-3.7	81.7	84.9	3.9%	82.5	86.0	4.2%
Semi-detached houses (%)	0	0	0	3.6	1.3	-6.4	4.7	3.4	-27.7%	5	3.0	-40.0%
Row houses (%)	5	4.2	-16.0	1.4	2	43	3.7	3.4	-8.1%	0	0	0
Apartments, duplex (%)	0.7	0.3	-57.0	0	0.7		0	0	0	2.5	3.0	20.0%
Apartment less than 5 storeys	15.1	15.2	0.7	5.8	9.4	62	4.2	3.9	-7.1%	10	7.0	-30.0%
Apartments more than 5 storeys	0	0	0.0	0	0	0	0	0	0	0	0.0	0
Other single attached dwellings (%)	0	19.7		0	0	0	5.8	0	-100.0%	2.5	1.0	-60.0%
Number of owned dwellings	1,115	1,125	0.9	610	610	0	740	720	-2.7%	330	415	25.8%
Number of rented dwellings	380	380	0	80	130	63	210	170	-19.0%	70	100	42.9%
Band Housing	0	0	0	0	0	0	0	0	0	0	0	0
Average value of owned dwelling	\$72,905	\$98,686	35.4%	\$75,918	\$94,112	24.0%	\$127,696	\$72,593	-43.2%	\$52,395	\$88,732	69.4%
Average rent	n/a	\$746	n/a	n/a	\$707	n/a	n/a	\$675	n/a	n/a	\$603	n/a
	White River			Biigtigong Nishnaabeg			Pic Mobert			Pays Plat		
	2006	2016	% change	2006	2016	% change	2006	2016	% change	2006	2016	% change
Total private dwellings	443	411	-7.2%	n/a	177	n/a	0	119	n/a	n/a	35	n/a
Occupied private dwellings	355	300	-15.5%	120	165	37.5%	105	115	9.5%	30	35	16.7%
Single detached houses (%)	67.6	65	-3.8%	87.5	87.9	0.5%	89.5	52.2	-41.7%	83.3	100	20.0%
Semi-detached houses (%)	14.1	13.3	-5.7%	0	3	0	0	0	0	3.6	0	-100.0%
Row houses (%)	0	0	0	8.3	9.1	9.6%	0	0	0	1.4	0	-100.0%
Apartments, duplex (%)	0	1.7	0	0	0	0	0	0	0	0	0	0



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Table 6.12: Housing Characteristics, RSA, 2006 and 2016

	Marathon			Terrace Bay			Manitouwadge			Schreiber		
	2006	2016	% change	2006	2016	% change	2006	2016	% change	2006	2016	% change
Apartment less than 5 storeys	15.5	18.3	18.1%	0	0	0	0	0	0	5.8	0	-100.0%
Apartments more than 5 storeys	0	0	0	0	0	0	0	0	0	0	0	0
Other single attached dwellings (%)	2.8	0	-100.0%	0	0	0	0	0	0	0	0	0
Number of owned dwellings	255	225	-11.8%	35	85	142.9%	10	40	300.0%	n/a	15	n/a
Number of rented dwellings	100	75	-25.0%	20	10	-50.0%	25	10	-60.0%	n/a	0	n/a
Band Housing	0	0	0	n/a	75	n/a	n/a	70	n/a	n/a	15	n/a
Average value of owned dwelling	\$82,911	\$84,056	1.4%	0	0	0	0	0		0	0	
Average rent	n/a	\$710	n/a	n/a	0	n/a	n/a	0	n/a	n/a	0	n/a

Source: Statistics Canada 2017



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Of the 152 dwellings on the Biigtigong Nishnaabeg reserve lands, 120 are on track to eventually have occupants own their homes. Over the last 10 years, the community has built 46 new homes and repaired an additional 40. In 2020, Biigtigong is finalizing the completion of three duplexes which will help with the ever-growing demand for housing. Currently, there are plans to develop an addition four units with construction expected to start in the spring of 2021 (BN 2020).

In 2011, there were 18 hotels, motels, and bed-and-breakfasts in the RSA with a total of 400 rooms (gck Consulting 2011). As of September 2020, there are 24 temporary accommodations in the RSA communities with 470 rooms (Table 6.13) (TripAdvisor 2020). GMS Camps and Accommodations is a company that has been providing temporary worker accommodations to contractors and workers deployed in Marathon, Manitouwadge, White River, Biigtigong Nishnaabeg, and Pic Mobert since 2018. It has 50 rooms in two facilities and can provide catering services (GMS Camps no date). There are no hotels or motels in Biigtigong; however, there is a one-bedroom guest suite available for rent, which is referred to as the Pic River Guest Suite (BN 2020).

Table 6.13: Temporary Accommodations, RSA, 2020

Community	Hotel	# Rooms
Biigtigong Nishnaabeg	Pic River Guest Suite	3
Marathon	Airport Motor Inn	44
	Zero 100 Motor Inn	32
	Lakeview Manor	4
	Marathon Harbour Inn	16
	GMS Camps	113
Terrace Bay	Imperial Drifter Motel	21
	Norwood Motel	15
	Red Dog Inn	40
	Coach House Motel	10
	Jackfish Lake Motel Efficiency Cottages	15
Manitouwadge	Turners Northwoods Adventures	7
	Select Inn	13
	Northern Comfort Bed and Breakfast	3
Schreiber	The Voy	20
	Rongie Lake Motel	4
	Nor-West Motel	10
	Sunset Motel	12
	Villa Bianca Inn	30
	Birch Grove Housekeeping Motel	12
White River	White River Motel	29



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Table 6.13: Temporary Accommodations, RSA, 2020

Community	Hotel	# Rooms
	Continental Motel	43
Total # Rooms		364
Source: TripAdvisor 2020		

The communities in the RSA belong to the Northeastern Ontario Tourism Region which had a temporary accommodation (e.g hotels and motels) occupancy rate of 62.0% in 2010. This had decreased to 59.7% in 2018 (Ontario Ministry of Heritage, Sport, Tourism, and Culture Industries 2020). As is the case with owned and rented housing in the RSA, the vacancy rate for temporary accommodations is very low and rooms must be booked well in advance (Skworchinski, pers. comm. 2020).

6.4.3 Education

Five school boards administer education in the RSA: Superior-Greenstone District School Board, Superior North Catholic District School Board, Huron Superior Catholic School Board, Conseil scolaire Public du Grand Nord de l'Ontario and Conseil scolaire de district catholique des Aurores boreales.

Table 6.14 lists the elementary and secondary schools in RSA communities and their 2019 enrolments.

Table 6.14: Schools and Enrolment in the RSA, 2019

Municipality	School	Type	Enrolment 2018/2019
Marathon	Marathon High	Secondary	162
	Holy Saviour	Elementary	100
	Margaret Twomey Public	Elementary	172
	Ecole catholique Val-des-Bois	Elementary	Suppressed*
	Ecole secondaire Cite-Superieure	Secondary	Suppressed*
Terrace Bay	Terrace Bay Public	Elementary	104
	St. Martin Catholic	Elementary	355
	Ecole catholique Franco Terrace	Elementary	Suppressed*
	Lake Superior High	Secondary	88
Manitouwadge	Manitouwadge Public	Elementary	43
	Manitouwadge High	Secondary	62
	Our Lady of Lourdes	Elementary	80
	publique Franco-Manitou	Elementary	50
Schreiber	Schreiber Public	Elementary	50
	Holy Angels	Elementary	55



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Table 6.14: Schools and Enrolment in the RSA, 2019

Municipality	School	Type	Enrolment 2018/2019
White River	St. Basil	Elementary	Suppressed*
	Michipicoten High School	Secondary	100
Biigtigong Nishnaabeg/Pic River	Pic River Elementary	Elementary	63
	Pic River Private High School	Secondary	15
Pic Mobert	Netamisakomik Centre for Education	Elementary	Not available
Source : Christianson, G., pers. Comm., 2020 ; Ontario Ministry of Education 2020 ; Michano, pers. comm.			
*enrolment numbers not available			

Biigtigong Nishnaabeg offers elementary and secondary educational services within the community to its membership. The community employs a Director of Education and the role of this position is to ensure that education is administered throughout the community as a foundation to enable participation in the social, economic and political advancements of Biigtigong Nishnaabeg. Four education programs are offered to individuals residing in the community, including the early years Children and Family Learning Centre, the elementary program, the alternative secondary program, the off-reserve secondary program, and the post-secondary student support programs.

The Biigtigong Nishnaabeg Children and Family Learning Centre is a licensed child-care centre offering daycare and outreach programs for children 1-12 years of age along with their families. The centre consists of one supervisor and seven staff members who operate the program. Along with external partnerships, the centre offers programs and services on an out-reach basis coordinated by a parent/family outreach worker.

Students attend Pic River Elementary School from Junior Kindergarten through to Grade 8. The school has a staff of 15, including teachers, tutors, a librarian, and administrative staff. It offers a community-based curriculum that emphasizes land-based education, cultural and spiritual practices and teachings of the Anishnaabeg, as well as community-based activities. Grades 9 through 12 are offered privately through Pic River Private High School, which employs one student support worker and one full-time teacher. Students can also attend high school in Marathon (BN 2020).

Biigtigong Nishnaabeg is currently seeking approval with Indigenous Services Canada (ISC) to construct a new K-8 education facility. In 2016, Biigtigong Nishnaabeg was approved to construct such a facility, but due to construction bid prices exceeding the current budgets, the project was lost. In the summer of 2020, a new project approval request for the education facility was completed and is now awaiting approval (BN 2020).



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There are several post-secondary education institutions in the RSA. Confederation College in Thunder Bay offers a full range of programs and educational services: full time post-secondary programs; part time credit/non-credit courses; specialty programs for business/industry, pre-employment and skills training programs; apprenticeship programs; and, cooperative/workplace training programs. Confederation College's Northshore campus in Marathon, which had previously been located inside the Marathon High School, re-opened at a new facility in June 2019. In 2019-2020, a total of 6,995 students (3,688 full-time and 3,307 part-time) were enrolled at Confederation (Confederation College 2020).

Lakehead University has campuses in Thunder Bay and Orillia, Ontario. In 2016-2017, Lakehead University had a total enrolment of 7,070 undergraduate and graduate students (Lakehead University 2017). Algoma University has campuses in Sault Ste. Marie, Brampton, and Timmins, Ontario and had a total enrolment of 1,370 in 2019. Sault College in Sault St. Marie had a total enrolment of 6,900 in 2019.

Residents of White River also have access to an Adult Learning Centre and Contact North offers access to university and college courses through distance learning and online education.

6.4.4 Health Services and Programs

The RSA communities are part of the District of Thunder Bay, which is one of five sub-regions within the North West Local Health Integration Network (LHIN) that represents a local planning area for health services. The District of Thunder Bay sub-region is composed of five Local Health Hubs - Greenstone, Manitouwadge, Marathon, Nipigon, and Terrace Bay (North West LHIN 2014).

In 2019, the North West LHIN had 372 family medicine physicians, up 13.4% from 328 in 2015. This represents 156 physicians per 100,000 population. Between 2015 and 2019, the number of specialists in the North West LHIN increased 12.3% from 187 to 210, representing 88 physicians per 100,000 population. In 2019, Ontario had 115 family physicians and 117 specialists per 100,000 population (CIHI 2019a).

Health care facilities available in the RSA communities are listed in Table 6.15.

Table 6.15: Hospitals and Clinics in the RSA

Hospital / Healing Lodge	Community	# Beds	Medical Clinic	Community	# Health care Professionals
Wilson Memorial General Hospital	Marathon	22	Marathon Family Health Team	Marathon	9 Doctors
The McCausland Hospital	Terrace Bay	45	Aguasabon Medical Clinic	Terrace Bay	2 Doctors
Sante Manitouwadge Health	Manitouwadge	18	J.E. Stokes Medical Centre	Terrace Bay	1 Doctor
			White River Medical Centre	White River	1 Nurse Practitioner



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Table 6.15: Hospitals and Clinics in the RSA

Hospital / Healing Lodge	Community	# Beds	Medical Clinic	Community	# Health care Professionals
			Biigtigong Nishnaabeg Mno-zhi-yaawgamig/Pic River Health Centre	Pic River	2 Doctors on rotation
			Pic Moberg Health Centre	Pic Moberg	
Source: CIHI 2019b					

There are three hospitals in the RSA with a total of 97 acute care beds. There are also five medical clinics which offer a range of medical and health services.

Health services in First Nations communities are provided through federally-funded, community-based programs that are operated through local health centres. These centres promote physical and mental health for community members and offer a similar suite of services in each community.

Biigtigong Nishnaabeg Health operates out of the Biigtigong Nishnaabeg Health Centre. The community signed a Health Transfer Agreement with ISC-First Nations and Inuit Health Branch in May 1997, which was renewed for another five years in 2017. This agreement allows for increased autonomy in determining what types of health care services are provided in the community to meet the needs of members. In 2018, Biigtigong Nishnaabeg became the host community for The North East Mental Wellness & Crisis Response Team for the communities of Pays Plat First Nation, Michipicoten First Nation, Pic Moberg First Nation and Biigtigong Nishnaabeg. This team responds to crisis situations and provides ongoing mental health services to individuals, groups, and families affiliated with these four communities. The community also receives visiting specialists such as medical doctors, dieticians, diabetes educators and traditional healers.

In 2019, Biigtigong Nishnaabeg signed a Memorandum of Understanding with Dilico for regularly scheduled visits to the community by their Primary Care Travelling Team. This team provides a collaborative health care team approach and provides the community members of Biigtigong Nishnaabeg with access to a nurse practitioner, pharmacist, social worker, chiroprapist, traditional healing liaison, registered dietician, psychologist, mental health nurse, and a registered Practical Nurse.

The Biigtigong Nishnaabeg Social Service Program provides the following services to the community members:

- One-on-one counselling using various treatment modalities and addressing a variety of mental health concerns
- Advocacy
- Workshops & presentations
- Family Support



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- Band representation for child protection
- 50+ Programming
- School Programming
- Crisis Counselling, Intervention, and follow-up
- Case Management

Biigtigong Nishnaabeg also administer the Biidaaban Healing Lodge, a 12-unit facility which offers treatment for drug and alcohol addictions through a combination of modern medicine and traditional native healing.

The Pic Moberg Health Centre offers minor treatment through community nursing and health team staff and facilitates and coordinates visits from specialists including medical doctors from Marathon Family Health Team, dietitians, diabetes educators, traditional healers and dental hygienists (Northwesthealthline.ca 2020).

Staff at the Pays Plat Health Centre work closely with the Community Health Nurse and administer several health programs, including Aboriginal Diabetes Initiative, Brighter Futures, and Canada Prenatal Nutrition Program (Northwesthealthline.ca 2020).

6.4.5 Emergency Services

Police services in the RSA are provided by Ontario Provincial Police (OPP) and by the Anishinabek Police Service (APS).

The OPP Marathon Detachment provides services to Marathon, Manitouwadge, Biigtigong Nishnaabeg, and Pic Moberg First Nation. The OPP Nipigon Detachment – Schreiber Satellite Detachment provides police services to Terrace Bay, Schreiber, and Pays Plat First Nation, while White River receives police services from the OPP Superior East (Wawa) Detachment.

The APS Biigtigong Nishnaabeg detachment, which has six officers and one administrative support person, provides service to BN and Pic Moberg First Nation (BN 2020). The APS is funded through a tripartite agreement with the federal (52 percent) and provincial government (48 percent) and member First Nations and works with the Royal Canadian Mounted Police (RCMP) and the OPP to access more support and services if required to serve member First Nations. The APS is designed to provide a community-based peacekeeping service in the spirit of partnership with all Nations.

Table 6.16 lists the police detachments and the number of officers in the RSA. In total, there are 140 officers in the RSA. Table 6.16 also provides the crime severity index (CSI), which measures the level of severity of police-reported crime, for each police service. Between 2014 and 2018, the CSI has increased in every police service in the RSA. In both the Marathon and Superior East (Wawa) OPP detachments,



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the CSI has more than doubled. For context, in 2018, Ontario's CSI was 59.96 (Statistics Canada 2019c). In 2018, the CSI and rate of criminal code violations were highest for the APS and lowest for the OPP Schreiber (Terrace Bay) detachment. The rate of criminal code violations per 100,000 population in Ontario in 2018 was 4,311.46 (Statistics Canada 2019d).

Table 6.16: Police Services, Number of Members and CSI, RSA

Police Service	# Members	2014 CSI	2018 CSI	% Change	Rate of Criminal Code Violations per 100,000 Population 2018
Anishinabek Police Service (Biigtigong Nishnaabeg)	6	120.17	194.53	61.9	14,815.89
OPP Marathon	23	43.68	117.16	168.2	6,114.29
OPP Nipigon (Red Rock)	30	-	-	-	-
OPP Manitouwadge	6	118.47	47.29	-60.1	4,032.67
OPP Superior East (Wawa)	45	48.74	99.58	104.3	8,917.63
OPP Schreiber (Terrace Bay)	30	23.26	27.43	17.9	2,411.87

Notes:
- Not available for reference period
Source: Skworchinski, pers. comm; Statistics Canada 2019c, d

There are seven fire departments in the RSA with 108 members (Table 6.17).

Table 6.17: Fire Services, RSA

Fire Department	# Members
Marathon Fire Department	22
Terrace Bay Fire Department	26
Manitouwadge Fire Department	23
Schreiber Fire Department	20
White River Fire Department	17
Biigtigong Nishnaabeg Fire Department	12
Pays Plat First Nation Fire Department	-

Source: Town of Marathon 2019; Township of Manitouwadge 2020; Township of Schreiber 2020; Township of Terrace Bay 2020; Township of White River 2020; Skworchinski, pers. comm., 2020



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Most ambulance services are provided by Superior North Emergency Medical Services (EMS), which has 19 stations throughout the District of Thunder Bay. In the RSA, there are Superior North EMS stations in Marathon, Terrace Bay, Manitouwadge, and Schreiber. The Marathon EMS also provides service to Biigtigong Nishnaabeg, Pic Mobert First Nation, and Pays Plat First Nation. Superior North EMS has a team of approximately 190 paramedics who respond to approximately 25,000 calls for service each year (Superior North EMS 2018). In the District of Thunder Bay, the average response time, or average travel time to patients for highest priority calls, for EMS in 2019 was 7 minutes, 22 seconds. The response time standard for EMS response to calls ranges from 6 to 21 minutes depending on the severity and urgency of the threat to life (Ontario Ministry of Health and Long-Term Care 2019).

Algoma District Paramedic Services EMS has approximately 70 paramedics working in eight stations, including one in White River (Algoma District Services Administration Board 2020). The response time standard for calls for service from Algoma District Paramedic Services ranges from 6 to 25 minutes and the average response time is 8 minutes, 57 seconds (Ontario Ministry of Health and Long-Term Care 2019).

Biigtigong Nishnaabeg community members who require transport to medical appointments in the local area have access to transportation via a Medical Transportation program 24 hours per day, 7 days per week. Travel to specialist appointments for medical care are coordinated through the Community Health Clerk (BN 2020).

Table 6.18 lists the emergency medical services/ambulance bases in the RSA and their annual calls for service.

Table 6.18: EMS Services, RSA

EMS Service	# Paramedics	# Calls for Service 2011
Superior North Emergency Medical Services		
Marathon EMS station	6	498
Terrace Bay EMS Station	5	209
Manitouwadge EMS Station	6	160
Schreiber EMS Station	6	167
Algoma EMS		
White River Station	-	-
Source: Superior North EMS 2018		



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6.4.6 Utilities

6.4.6.1 Water and Sewer

Water distribution and treatment services, including sewage treatment, are provided by the municipalities of Marathon, Terrace Bay, Schreiber, Manitouwadge, and White River. A summary of water and sewage infrastructure is provided in Table 6.19.

Table 6.19: Water and Wastewater Treatment Facilities in the RSA

Community	Infrastructure	Capacity	Maximum Usage
Marathon	Five groundwater wells Industrial Park Booster Station, the Penn Lake Heights Reservoir & Booster Station, and the Marathon water distribution system	10,968.64 m ³ /day	6,564 m ³ /day
	Marathon wastewater treatment plant	4,400 m ³ /day -	-
Terrace Bay	Terrace Bay water treatment plant	3,888m ³ /day	1791.4 m ³ /day
	Sedimentation tanks and exfiltration lagoons	454 m ³ /day	-
Manitouwadge	Five ground water wells, a treatment plant and a reservoir	10,472 m ³ /day	1964.70 m ³ /day
	Aerated sewage lagoons	4,100 m ³ /day	
Schreiber	Schreiber water treatment plant	4,540 m ³ /day	2,413 m ³ /day
	Schreiber sewage treatment plant	4,550m ³ /day	1,604m ³ /day
White River	White River Water Treatment Plant	-	-
	Sewage system consists of four pumping stations and a waste stabilization pond	-	-
Source: Northern Waterworks Inc. 2019; Ontario Clean Water Agency 2020, 2019, 2017; Ontario Ministry of the Environment and Climate Change 2019, 2018			

Biigtigong Nishnaabeg has an aging water treatment plant that requires upgrades, which has put the community in a very vulnerable position when trying to supply potable water and to maintain its fire protection abilities. Biigtigong Nishnaabeg is awaiting approval of a \$15 million water treatment facility that will better meet the community’s consumption needs. All households and community buildings utilize septic fields (BN 2020).

In 2016, Pic Mobert First Nation opened a new water treatment plant with capacity to supply the community (Garrick 2016).



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6.4.6.2 Landfill

Marathon operates a landfill site within its municipal boundaries. It opened in July 2015 when the former landfill east of the Town reached capacity. As of December 2018, the remaining capacity of the site was estimated at 346,177 tonnes. The site is not expected to reach capacity until 2140 (Skworchinski, pers. comm., 2020).

In order to manage waste after its landfill site was closed in 2018, BN purchased a truck and garbage compactor for weekly roadside pickup of domestic waste, which is transferred to the Marathon landfill. To enhance waste management, the community also has a bi-weekly recycling pick up.

6.4.7 Transportation/Roads

The main highway in the RSA is Highway 17, which is the primary land corridor linking Canada from east to west. Within the Project Area, Highway 17 is identified as a Rural Arterial Undivided King’s Highway with a design speed of 110 km/h and a posted speed limit of 90 km/h. This section is a two-lane, Class III Controlled Access Highway and is a part of the Trans-Canada Highway.

Table 6.20 identifies the main sections of Highway 17 within the RSA and the Average Annual Daily Traffic (AADT) on each section.

Table 6.20: AADT on Highways in the RSA, 2016

Highway	From	To	AADT 2016
17	Algoma/Thunder Bay Dist Bdy	Sec Hwy 614 (To Manitouwadge)	1,950
17	Sec Hwy 614 (To Manitouwadge)	Hwy 627 - To Heron Bay - Pukaskwa Park	2,500
17	Hwy 627 - To Heron Bay - Pukaskwa Park Peninsula Rd (Former Hwy 626 To Marathon) (S)	Hwy 627 - To Heron Bay - Pukaskwa Park Peninsula Rd (Former Hwy 626 To Marathon) (S)	2,600
17	Peninsula Rd (Former Hwy 626 To Marathon) (S) Jackfish Rd (S) - Syine Twp	Peninsula Rd (Former Hwy 626 To Marathon) (S) Jackfish Rd (S) - Syine Twp	2,100
17	1.1 Km W of Sawmill Creek Culv Cpr Oh E Abut - Terrace Bay 17.4 2,300	1.1 Km W Of Sawmill Creek Culv Cpr Oh E Abut - Terrace Bay	2,300
17	17 Cpr Oh E Abut - Terrace Bay Aguasabon River Br - E Abutment	17 Cpr Oh E Abut - Terrace Bay Aguasabon River Br - E Abutment	1,950
17	Aguasabon River Br - E Abutment Quebec St - Schreiber (S) 12.0 3,000	Aguasabon River Br - E Abutment Quebec St - Schreiber (S)	3,000
17	17 Quebec St - Schreiber (S) Cpr Oh Selim	17 Quebec St - Schreiber (S) Cpr Oh Selim	2,600
Source: MTO 2016			



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During the summer of 2020, Biigtigong Nishnaabeg was informed of approval to improve existing roadbed throughout the community. The project would include widening and increasing the structural strength of Access Road and Pic River Road. Traffic calming devices will also be implemented to slow traffic in residential streets. These improvements are planned for the spring of 2021 (BN 2020).

6.5 COMMUNITY WELL-BEING

The Community Well-Being (CWB) Index is a method of assessing socio-economic well-being in Canadian communities. Various indicators of socio-economic well-being, including education, labour force activity, income and housing, are derived from Statistics Canada's Census of Population and combined to give each community a well-being "score". These scores are used to compare well-being across First Nations and Inuit communities with well-being in other Canadian communities.

CWB Index scores for 2016 for the municipalities and First Nations in the RSA are summarized in Table 6.21. Individual component scores are not available for Pic Moberg First Nation and Pays Plat First Nation.

In 2016, Terrace Bay had the highest overall CWB Index score in the RSA and Pic Moberg First Nation had the lowest score (CIRNAC 2016). In general, the component with the highest scores throughout the RSA was housing, while education scores were the lowest.

Table 6.21: CWB Scores for RSA Communities, 2016

Community	Income Score	Education Score	Housing Score	Labour Force Score	CWB
Biigtigong Nishnaabeg	67	53	85	75	70
Pic Moberg First Nation	-	-	-	-	53
Pays Plat First Nation	-	-	-	-	65
Marathon	81	58	97	84	80
Schreiber	78	58	94	85	79
Terrace Bay	82	64	96	85	82
Manitouwadge	81	52	94	76	76
White River	80	52	89	87	77

Source: CIRNAC 2016



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6.6 LAND AND RESOURCE USE

6.6.1 Land Use Planning and Zoning

6.6.1.1 Crown Land Use

The SSA is located entirely on Crown land. Crown land represents 96.5% of the LSA (3,985 ha) and 96.2% of the RSA (439,797 ha).

According to the Ministry of Natural Resources and Forestry (MNRF) Crown Land Use Policies, the SSA is primarily located within a General Use Area designation described as G2690 (General Use Area Marathon) and G1798 (General Use Area West Multiple Resource Management Area), with a small portion located in the Enhanced Management Area designation of E1747r (Pic River Recreation Access Area). The LSA also includes a portion of lands designated as E2233g (Lake Superior Shoreline). Figure 3 (Appendix A) illustrates the Crown land use designations within the SSA and LSA. The intent of the specific Crown land use designations identified on Figure 3 (Appendix A) include:

- G2690 (General Use Area Marathon): provide a mix of uses including residential, commercial, public services, recreation, and resources extraction to allow for community growth in accordance with the municipal Official Plan (MNR, 2006a).
- G1798 (General Use West Multiple Resource Management Area): promote and encourage a multitude of resource uses while minimizing conflicting uses (MNR, 2016a).
- E1747r (Pic River Recreation Access Area): permit resource management activities while maintaining and enhancing access to natural and recreation uses (MNR, 2016b).
- E2233g (Lake Superior Shoreline): provide long term tourism and recreational benefits through the conservation of significant scenic, recreational and tourism attributes (MNR, 2018).

Mine exploration and development is a permitted use within all of these designations, except where development is controlled within 300 m of the shoreline of Lake Superior, which is located more than 3 km from the SSA boundary.

6.6.1.2 Municipal Planning Documents

The Ontario *Planning Act* (1990) requires municipalities to prepare an Official Plan that guides development within the community. These plans are to be reviewed every five years and updated as needed. The Ministry of Municipal Affairs and Housing (MMAH) is responsible for approving Official Plans and for granting amendments to the plan. The MMAH is also the approval authority for *Planning Act* decisions for lands within the unorganized municipalities in the Thunder Bay District.



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The Town of Marathon approved a new Official Plan in 2015 (Quartek Group, 2015). The plan has seven land use designations:

- Rural
- Residential
- Institutional
- Commercial
- Industrial
- Open Space – Recreation
- Natural Hazard

The SSA is in an area designated as rural, which permits uses related to natural resources, such as mining and mineral exploration. The Official Plan includes mining operation policies within the rural designation to ensure that such facilities are compatible with surrounding land uses and that they will not adversely impact water resources and activities. While the use is permitted within the rural designation, Section 3.2.18 of the Official Plan states that a Zoning By-law amendment and site plan agreement will be required prior to development. Lands within the LSA are designated rural, heavy industrial, residential multiple, and highway commercial. These uses reflect the existing aggregate operations, residences, and commercial operations that exist along Highway 17. Land use designations within the vicinity of the LSA are shown on Figure 4 (Appendix A).

The Official Plan also includes policies that pertain to natural heritage features and hazards. The plan identifies the following natural features:

- Fish habitat
- Significant wildlife habitat
- Habitat of threatened and endangered species
- Wetlands

The Official Plan does not permit development or site alteration within these features or adjacent lands (generally 120 m) until it has been demonstrated that there will be no negative impacts to features or their functions. In the case of wetlands, if a Provincially Significant Wetland is identified, development or site alteration is not permitted.

The Official Plan includes a Natural Hazard designation that is composed of all lands within 15 m of the top-of-bank of any watercourse or waterbody, lands within 15 m of the floodplain extent of any watercourse or waterbody, and the high water mark along the Lake Superior shoreline. The Official Plan



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states that any development proposed within these lands must be supported by engineered designs and technical studies, which demonstrate that the site is safe, including means of safe access, and that natural hazards are not created or aggravated.

6.6.2 Protected Areas

As outlined in Section 1.4.2.3 of the original EIS, there are several areas that are protected from industrial development including parks, reserves, and management areas.

Parks within the RSA have not changed since the completion of the EIS. The two closest parks to the SSA are Red Sucker Point Provincial Park and Craigs Pit Provincial Park, which are both located approximately 5 km from the SSA. These parks are nature reserves with no formal facilities. The Pukaskwa National Park and Neys Provincial Park, which are the closest parks that offer day use and overnight facilities, are located approximately 16 km and 12 km from the SSA, respectively. The Town of Marathon operates the Penn Lake Campground, which is located approximately 5 km from the SSA.

The Great Lakes Water Quality Agreement established 43 Areas of Concern given their severely degraded water quality and environmental health. Peninsula Harbour, located on the north side of the Town of Marathon, was designated as an Area of Concern (Government of Canada, 2017). The Peninsula Harbour Area of Concern is located outside of the LSA, but does receive drainage from subwatershed 109, which includes the airport lands and a small portion of the SSA. In 2012, all actions required to restore ecosystem health and water quality were completed and ongoing monitoring will determine whether Peninsula Harbour will be delisted as an Area of Concern in the future.

6.6.3 Mineral Exploration and Development

Historically, the Thunder Bay South District has seen mining operations for gold, silver, base metal, and platinum group elements. Gold exploration in the area began in the late 1800s and continues to the present day. Silver production in the area, likewise, began in the mid to late 1800s and continued until the early 1900s.

As of 2019, the Thunder Bay South District had two operating mines; the Hemlo Gold Mine, which has since altered production, and the Lac Des Iles Palladium mine north of Thunder Bay. The Hemlo Gold Mine previously consisted of the David Bell Mine, which ceased production in 2010, and the Golden Giant Mine, which ceased production in 2014 (MDO,2020). Currently, the Hemlo Gold Mine consists of the Williams Mine, which is projected to maintain open pit and underground operations until 2029-2031 (CBC, 2017).

Additional detail and evaluation of recent site exploration (1940-2010) is provided in Section 1.4.2.5 of the original EIS.



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6.6.3.1 Mining Claims

A mining claim grants its owner the exclusive rights to explore for minerals on a designated piece of land. The number of claims and claim holders, as well as the size of claim areas, provides an indication of the level of mining exploration activity in an area.

Table 6.22 summarizes the mining claims within the RSA and compares the total claims to those associated with the Project. The claim areas owned by GenPGM account for 16.4% of the total claims in the RSA. There are 49 other claim holders within the RSA.

Table 6.22: Mining Claims within the Study Areas

	SSA	LSA	RSA
Number of Total Mineral Claims ¹	73	215	7,265
Number of Claim Holders	3	5	49
Percent Area of Project Claims of Total Claim Area	100%	33.9%	1%

¹Includes boundary cell claims that include multiple owners for the same physical location

Source: ENDM, 2020

Mining claims within the SSA have been or will be converted to mining leases that are held by GenPGM for this Project.

6.6.3.2 Aggregate Quarries

Several aggregate operations exist within the area, the largest of which are owned and operated by Lafarge Canada and its subsidiaries. Table 6.23 details the aggregate operations within the LSA.

Table 6.23: Active Aggregate Operations within LSA

Client Name	Mapped Name	Location Name	Operation Type	Max Annual Tonnage	Authorized Area (ha)
Lafarge Canada	Aggregate Permit	East of Jct. Hwy 17 and 627	Pit	400,000	44.5
Lafarge Canada	Aggregate Permit	On Old Heron Bay Road	Pit	400,000	34.5
The Warren Paving & Materials Group (Lafarge Canada)	Aggregate Permit	O'Neil Pit	Pit	100,000	14.36
Aecon Mining Inc.	Aggregate Permit	N/A	Pit	25,000	12.2
The Corporation of the Town of Marathon	Aggregate Permit	Hwy 626 Pit	Pit	50,000	12
Generation PGM	Aggregate Permit	Marathon Site	Pit	N/A	10.3



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Table 6.23: Active Aggregate Operations within LSA

Client Name	Mapped Name	Location Name	Operation Type	Max Annual Tonnage	Authorized Area (ha)
J. Provost Contracting	Aggregate Permit	Racetrack Pit	Pit	0	10
J. Provost Contracting Ltd.	Aggregate Permit	Camp 19 Rd. Marathon	Pit	N/A	3.4

Source: MNR, 2020a

6.6.4 Forestry

Forestry operations within the RSA declined in the mid-2000s, culminating in the permanent closure of the Marathon Pulp Inc. pulp mill and the temporary closure of the Terrace Bay pulp mill in 2009 (Nawiinginkoima Forest Management Corporation (NFM), 2019). Since this time, harvest levels have gradually increased, and it is expected that this trend towards a more productive forestry industry will continue for the next ten years.

Forestry activities on Crown land are regulated under the *Crown Forest Sustainability Act* and the Forest Management Planning Manual, which are administered by the MNR (Government of Ontario, 1994). The Act divides the province into Forest Management Units (FMUs) and requires that a forest management plan be prepared by the licence holder of each FMU. The Project is located in the Pic Forest Management Unit, which is managed by the NFM, a Local Forest Management Corporation, under the *Ontario Forest Tenure Modernization Act* (NFM, 2012).

The Big Pic Forest Management Unit and the Pic River Forest Management Unit were amalgamated in 2013 to form the Pic Forest Management Unit. The Pic Forest Management Unit is 1,153,237 ha in size, of which 98% (1,131,800 ha) is Crown land (NFM, 2019). The SSA previously overlapped the Big Pic Forest Management Unit.

The establishment of a new Forest Management Unit boundary resulted in the need for interim planning documents until a comprehensive Forest Management Plan could be produced. Current direction for forest management is provided through the Contingency Plan 2019-2021 for the Pic Forest (NFM, 2019) and the Summary of the Proposed Long-Term Management Direction for the Pic Forest Management Plan (NFM, 2018). The Pic Forest Management Plan is anticipated to be finalized by 2021.

The Contingency Plan (2019) established a planned harvest area of 21,270 ha between 2019-2021, with an additional 2,500 ha being carried over from the previous Contingency Plan (2017-2019). No harvest areas were identified within the SSA or LSA.

The Summary of the Proposed Long-Term Management Direction for the Pic Forest Management Plan (2018) outlines potential harvest areas until 2029; however, no potential harvest areas were identified within the SSA. A small portion of the LSA (approximately 10 ha) east of the Pic River is identified as a preferred harvest area (see Figure 5).



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Camp 19 Road is identified as a municipal/other road that terminates near the existing aggregate operations to the west of the SSA (NFMC, 2018). Additional details on Camp 19 Road can be found in Section 6.1.9. No forest access roads are proposed within the SSA or LSA. Access to the preferred harvest area on the east side of the Pic River is to be provided by a yet to be constructed forest access road that will be located outside of the LSA.

6.6.5 Agriculture

The original EIS identified that negligible agriculture existed in the area, (Stillwater, 2012), which is unchanged for the addendum. No agriculture activities occur within the SSA or LSA but do occur in the Thunder Bay district. The 2006 Census recognized 67 farms in the entire Thunder Bay district, with many farms growing hay, fodder crops and alfalfa with a minority growing potatoes, oats, and barley. The 2016 Agricultural Census identified 46 farms, representing a 31% decline (OMAFRA, 2016).

6.6.6 Hunting and Trapping

6.6.6.1 Hunting

Hunting and trapping are regulated by the MNRF under the *Fish and Wildlife Conservation Act* and Regulations (1997), which divide the province up into wildlife management units (WMUs) and govern hunting, trapping, fishing, and wildlife management activities in the province (Government of Ontario 1997). The LSA is located within, and portions of the RSA compromise, WMU 21A and 21B.

Hunting for small and big game species is licensed for Ontario residents and non-residents, with the exception of Indigenous communities hunting within traditional or treaty areas or hunting for food, social, or ceremonial purposes.

Within WMU 21A and 21B, hunting is permitted for moose, white tail deer, black bear, small game, and furbearing animals. Hunting in this area is traditionally undertaken with rifles, shotguns, muzzle loading guns, and bows; however, the use of falcons and dogs is also permitted in certain seasons. Hunting seasons are provided in Table 6.24.

Table 6.24: Hunting Seasons WMU 21A & 21B

Species	Open Season (Residents)	Open Season (Non-Residents)
Adult Moose	1. Rifles, Shotguns, Muzzle Loading Guns & Bows (October 17 th – December 15 th) 2. Bow (September 19 th – October 9 th)	3. Rifles, Shotguns, Muzzle Loading Guns & Bows (October 19 th – November 15 th) 4. Bow: (September 26 th October 16 th)
Adult and Calf Moose	5. October 24 th - October 31 st	6. October 24 th - November 6 th
Deer	7. Rifles, Shotguns, Muzzle Loading Guns and Bows (October 10 th – December 15 th) 8. Bow Only (September 1 st - October 9 th)	9. Zone 21A - Forbidden 10. Zone 21B Rifles, Shotguns, Muzzle Loading Guns & Bows (October 12 th – November 15 th)



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Table 6.24: Hunting Seasons WMU 21A & 21B

Species	Open Season (Residents)	Open Season (Non-Residents)
		11. Zone 21B Bow Only September 1 st - October 9 th
Black Bear	12. May 1 st - June 15 th	13. May 1 st - June 15 th
Wolf & Coyote	14. September 15 th - March 31 st	15. September 15 th - March 31 st
Small Game (Ruffed Grouse)	16. September 15 th – March 31 st *Daily limit of 5 and possession limit of 15	17. September 15 th – March 31 st *Daily limit of 5 and possession limit of 15
Small Game (Sharp tailed Grouse)	18. September 15 th – March 31 st *Daily limit of 5 and possession limit of 15	19. September 15 th – March 31 st *Daily limit of 5 and possession limit of 15
Small Game (Ring Necked Pheasant)	20. September 15 th – December 31 st *Daily limit of 10 and possession limit of 10	21. September 15 th – December 31 st *Daily limit of 10 and possession limit of 10
Small Game (Snowshoe Hare)	22. September 15 th – March 31 st *Daily limits of 5 and possession limit of 15	23. September 15 th – March 31 st *Daily limits of 5 and possession limit of 15
Small Game (Gray/Black and Fox Squirrel)	24. September 15 th – December 31 st *Daily limit of 5 possession limit of 15	25. September 15 th – December 31 st *Daily limit of 5 possession limit of 15
Small Game (Raccoon & Opossum)	26. October 5 th to January 31 st	27. October 5 th to January 31 st
Small Game (Red Fox & Skunk)	28. September 15 th – Final day of February	29. September 15 th – Final day of February
Small Game (Weasel)	30. October 25 th – Final Day February	31. October 25 th – Final Day February

Sources: Government of Ontario, 2020, MNR 2020b

The number of active hunters and harvests for WMU 21A and 21B is provided in Table 6.1-4. Within WMU 21A and 21B, moose is the most common species pursued by active hunters with an estimated 5,484 active hunters in 2018. The number of moose harvest in 2018 is estimated to be 243.

Table 6.25: Estimated Number of Active Hunters and Harvests for WMU 21A and 21B 2018

WMU	Species	Estimated Active Hunters ¹	Estimated Harvest ¹
WMU 21 A	Black Bear	646	90
	White tailed deer	251	0
	Moose	2,639	84
	Wolf Coyote	173	9
WMU 21 B	Black Bear	529	141
	White tailed Deer	35	0
	Moose	2,845	159
	Wolf Coyote	121	0

¹Harvest and active hunter numbers are estimates based on replies received from a sample of hunters and are therefore subject to statistical error.

Sources: Government of Ontario, 2019a, 2019b, 2019c, 2019d



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Migratory waterfowl hunted in WMU 21A and 21B is provided in Table 6.1-5. Species include ducks, rails, gallinules, coots, snipes, geese, woodcock, and mourning dove. The hunting season generally extends from September to December.

Table 6.26: Migratory Waterfowl Hunting Season WMU 21A & 21B

Species	Open Season
Ducks (non-harlequin) Rails (other than Yellow Rails & King Rails) Gallinules Coots Snipes Geese Woodcock Mourning Dove	September 5 th , 2020 *Waterfowl Heritage Day
Ducks (non-harlequin) Rails (other than Yellow Rails & King Rails) Gallinules Coots Snipes	September 10 th – December 24 th
Canada Geese & Cackling Geese	September 1 st – December 16 th
Geese (other than Canada Geese & Cackling Geese)	September 1 st – December 16 th
Woodcock	September 15 th – December 16 th

Source: Environment and Climate Change, 2020

6.6.6.2 Non-Resident Hunters (Guide Outfitting)

In order to hunt in Ontario, non-resident hunters must have a Non-Resident Outdoors Card in addition to any non-resident hunting or fishing licence tags and seals. Non-residents choosing to use a licensed bear hunting services operator are limited to hunting in the Bear Management Area (BMA) indicated on the licence validation certificate received from the operator. The SSA is located within BMA TR-21A-059 and TR-21B-033.

While hunting outfitters are not established within the Town of Marathon, several serve the broader region.



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6.6.6.3 Trapping

In Ontario, trapping is subject to regulations under the *Fish and Wildlife Conservation Act* (FWCA) and policies, which are administered by MNR. As with hunting, trapping inside provincial parks and Crown game reserves is prohibited (Government of Ontario, 1997). In accordance with FWCA 1997, trappers must:

- Hold a licence and complete a Fur Harvest, Fur Management, and Conservation Course
- Respect annual harvest quotas
- Use humane certified traps
- Limit trapping to traplines on Crown land or obtain written permission from the landowner if trapping on private property
- Adhere to open trapping season

Within the WMU 21A and 21B, a variety of furbearing species are available for trapping, including beaver, otter, bobcat and lynx, mink, muskrat, fisher and marten, raccoon, fox, skunk, red squirrel, weasel, black bear, wolf, and coyote. Table 6.27 identifies the traplines located within the RSA.

The trapping season varies but generally runs from the fall to spring months apart from skunk which can be trapped year-round.

Table 6.27: Registered Trapline Areas

Trapline Area Number	Licence Type	Area in SSA (ha)	Area in LSA (ha)	Area in RSA (ha)
TR017	Undefined	-	-	1172
TR018	Resident Trapper Licence	-	-	8495
TR019	Resident Trapper Licence	-	-	12296
TR020	Regular Registered Licence	-	-	21990
TR021	Undefined	-	-	17218
TR022	Undefined	1097	3382	14853
TR023	Regular Registered Licence	19	749	21019
TR026	Undefined	-	-	17275
TR027	Undefined	-	-	3400
TR028	Resident Trapper Licence	-	-	8882
TR032	Undefined	-	-	4502
TR033	Resident Trapper Licence	-	-	6323



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Table 6.27: Registered Trapline Areas

Trapline Area Number	Licence Type	Area in SSA (ha)	Area in LSA (ha)	Area in RSA (ha)
WA009	Undefined	-	-	528
WA033	Regular Registered Licence	-	-	13417
WA122	Undefined	-	-	13327
WA124	Regular Registered Licence	-	-	15235
WA125	Regular Registered Licence	-	-	15151
WA126	Undefined	-	-	21465
WA127	Regular Registered Licence	-	-	11107
WA128	Regular Registered Licence	-	-	13225
WA129	Regular Registered Licence	-	-	18880
WA130	Regular Registered Licence	-	-	9153
WA131	Regular Registered Licence	-	-	6655
WA139	Undefined	-	-	4331
WA140	Undefined	-	-	6923
WA141	Regular Registered Licence	-	-	17424
WA142	Regular Registered Licence	-	-	15886
WA143	Undefined	-	-	10428
WA144	Regular Registered Licence	-	-	4150

Source: Government of Ontario, no date

6.6.6.4 Bait Fish Harvesting

Bait harvesting is carried out in the RSA and is a licensed commercial activity. The province divides the territory into bait harvesting areas. The SSA is located within a single bait fish harvest area (NI3502). The LSA is located within two bait harvest areas (NI3101, NI3502), whereas the RSA is located within 23 bait harvest areas (see Table 6.28).

Table 6.28: Bait Harvest Areas in the RSA

Bait Harvest Area Number	Area in SSA (ha)	Area in LSA (ha)	Area in RSA (ha)
NI0003	-	-	16
NI0004	-	-	138
NI3101	-	61	1,3101
NI3302	-	-	11,083
NI3303	-	-	5,149
NI3402	-	-	25,493



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Table 6.28: Bait Harvest Areas in the RSA

Bait Harvest Area Number	Area in SSA (ha)	Area in LSA (ha)	Area in RSA (ha)
NI3403	-	-	25,362
NI3404	-	-	11,095
NI3502	1,116	4070	25,507
NI3503	-	-	25,466
NI3504	-	-	24,186
WA0034	-	-	10,370
WA0035	-	-	5
WA0332	-	-	19,485
WA0334	-	-	1,584
WA0342	-	-	25,409
WA0343	-	-	13,126
WA0351	-	-	25,521
WA0352	-	-	18,449
WA0354	-	-	25,460
WA0355	-	-	9,741
WA0601	-	-	10,145
WA0701	-	-	25,241

Source: Government of Ontario, 2019h

6.6.7 Fishing

The SSA and LSA are located within Ontario Fisheries Management Zone (FMZ) 7, whereas the RSA is located in FMZ 7 and FMZ 9:

- Fisheries Management Zone 7: FMZ 7 includes important fisheries for recreation and tourism, with Walleye, Northern Pike, Lake Trout, and Brook Trout being the main fisheries (Government of Ontario, 2015). FMZ 7 consists of land that drains into Lake Superior. It is comprised primarily of recreational and tourism-based fisheries and is a prominent region for Walleye, Northern Pike, Lake Trout, and Brook Trout. Brook Trout are stocked in many lakes in FMZ 7. This area also includes Pukaskwa National Park and the Chapleau Crown Game Reserve.
- Fisheries Management Zone 9 (Lake Superior): FMZ 9 includes the Canadian waters of Lake Superior, the largest surface area of any freshwater lake in the world and some of the lakes most unique aquatic and terrestrial environments. Active recreational fisheries in the area include fishing for Lake Trout, Walleye, Yellow Perch, Brook Trout, as well as introduced species including Chinook salmon, Coho salmon, and Rainbow Trout in open water and tributaries.



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Commercial fisheries in this area target Whitefish, Walleye, Cisco, Lake Trout, and Yellow Perch. Additional information on the geography of the area and the surrounding tributaries and watersheds is provided in the original EIS Sections 1.4.2.3.1, 1.4.2.3.3 and 1.4.2.3.5.

6.6.8 Recreation and Tourism

The RSA is located within Ontario Tourism Region 13C in northwestern Ontario. Regional tourism profiles (MTC, 2020) indicated that in 2017, there were 1,669,487 visits to the “13C North West Ontario” region, of which 64% 1,069,471 were from Ontario. The remaining visitors came from the rest of Canada (562,155 or 33%) and overseas (37,861 or 2.2%). Of those visits in 2017, 891,613 or 54% were for pleasure followed by 511,265 or 30.6% for recreation and entertainment.

Tourism in the Thunder Bay area (Zone 13C) consists of accommodation, arts, entertainment, and recreation, as well as food and beverage, transportation, travel, and retail. In 2018, tourism-related establishments made up 20% of all industry establishments in the region, compared to the provincial average of 13%.

Informal recreational tourism in the SSA, LSA and RSA includes fishing, swimming, boating, canoeing, biking, picnicking, and birding in the summer months. While winter recreation consists of snowmobiling, cross-country skiing, and snowshoeing. Recreational hunting, trapping, and fishing is discussed in Sections 6.1.6 and 6.1.7.

There are several snowmobile trails within the SSA, LSA, and RSA. The Marathon Sno-Kickers Snowmobile Club operates a trail along Camp 19 Road that extends from Highway 17 to the east of the Pic River (OFSC, no date).

Recreation is an important appeal for tourism in the RSA and has undoubtedly been hampered by the ongoing Covid-19 pandemic.

6.6.9 Other Land and Resources Uses

Figure 5 (Appendix A) illustrates surrounding land uses which are described in more detail below.

6.6.9.1 Utility Corridors

As described in the original EIS (Section 1.4.3.7.1), an overhead 115 kV transmission line to the Terrace Bay-Manitouwadge Transmission Line (M2W) will run through the northwest portion of the SSA immediately south of Hare Lake.



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6.6.9.2 Landfill

The Town of Marathon operates a landfill site on Camp 19 Road adjacent to the Marathon Airport. Additionally, a waste transfer station, recycling centre, and hazardous waste depot are located along Penn Lake Road, northeast of the town centre.

6.6.9.3 Marathon Airport

The Marathon Airport, a registered airport (International Air Transport Association Code CYSP), operates at the northeast intersection of the Highway 17 and Camp Road 19/Peninsula Road intersection, directly adjacent to the SSA. The facility is used by private plane owners and several commercial helicopter companies and occupies approximately 219 ha of land between a latitude of N 48 45"43" and longitude W 86 20"75".

6.6.9.4 Highway 17 Corridor

There are several commercial, residential, and industrial uses along Highway 17 within the Town of Marathon:

Table 6.29: Highway 17 Land Uses

	Location	Location within SSA and/or LSA
Travelodge Hotel and gas station	Located at the northwest corner of the Highway 17 and Camp 19 Road/Peninsula Road intersection	LSA
Town Entrance Park and Picnic Area	Located at the southeast corner of the Highway 17 and Camp 19 Road/Peninsula Road intersection	SSA, LSA
Highway Maintenance Yard	Located on the north side of Highway 17 north/west of the Marathon Airport	LSA
May's Gifts (residences)	Located on the north side of Highway 17 north/west of the Marathon Airport	LSA
Peninsula Hotel	Located on the north side of Highway 17 north/west of the Marathon Airport (adjacent to May's Gifts)	LSA
Wayfare Inn	Located the south side of Highway 17 north/west of the Marathon Airport (opposite May's Gifts)	LSA

6.6.9.5 Camp 19 Road

As identified in the EIS and the response to IR 4.2.4, Camp 19 Road is an old forest access road that provides access to the Pic River. It is municipally owned for the first 700 m, after which the unpaved portion falls under Crown ownership and Land Use Permit (LUP 1177-52) issued to GenPGM. It provides access to an aggregate operation located approximately 1 km from the Highway 17 intersection. It



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provides access for hunting, fishing, and other recreational uses. In the winter it is used as a snowmobile trail.

6.6.9.6 Cabins and Other Structures

Indigenous communities have identified several structures (e.g. cabins, tents, etc.) and other uses within the SSA and LSA; however, the locations and specific uses are considered confidential.

There are two cabins located on Hare Lake within the LSA, one of which is owned by GenPGM.



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7.0 SUMMARY AND CONCLUSIONS

A variety of sources were used to update the baseline socio-economic information in SID #22 (2011), including Statistics Canada, municipal websites, provincial agencies, school and health board websites, regional tourism development websites, as well as publicly-available information and EAs. In addition, conversations were held with administrative staff at municipalities within the LSA and with other local authorities to update existing conditions of the socio-economic environment.

Results of the research indicate that the RSA population has decreased since the writing of SID #22 and in 2016, it had a total population of 9,380. Persons of Indigenous identity accounted for 19.8% (1,855 persons) of the RSA population. The total labour force of the RSA in 2016 aged 15 years or over was 7,900 with a participation rate of 59.6% and an average unemployment rate of 9.5%. Persons of Indigenous identity accounted for 18.1% of the total labour force.

Mining remains an important industry in northwestern Ontario. Compared to provincial averages, a notably greater percentage of the RSA labour force is employed in the mining, quarrying, and oil and gas extraction sector. Overall, employment was greatest in the mining, quarrying and oil and gas extraction sector accounting for 14.8% of the labour force in 2016. Among the Indigenous RSA labour force, employment was greatest in retail trade and public administration with each accounting for 12.7% of the labour force (employing 110 persons each).

As of 2016, 50.6% of the total RSA population and 42.6% of the Indigenous RSA population had completed post-secondary education. Females generally accounted for a greater proportion of all other forms of post-secondary education (the exception being Indigenous persons holding a university certificate or diploma below bachelor level where educational attainment was equal among males and females). Levels of educational attainment are similar in the RSA to those seen across the province.

As indicated in SID #22, the communities in the RSA are well serviced by community and emergency services and have adequate infrastructure capacity (e.g., sewage, water) to serve existing populations and accommodate modest growth. This generally remains the case; however, some Towns are now experiencing very low vacancy rates for owned and temporary accommodations due to increased demand from mining activity in the region and the CSI has more than doubled in the Marathon and Superior East (Wawa) OPP detachments.

As the population of the RSA has been declining, it stands to reason that there is spare capacity with respect to other infrastructure and services. Capacity has been added in some areas with increases in the number of family medicine physicians and specialists in the health region and improvements to some utilities, including construction of a new landfill in Marathon.



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LRU in the RSA continues to be shaped by mining, forestry and recreation activity. There was a decline in forestry activity in the mid 2000's, culminating in the closure of the Marathon pulp mill in 2010; however, the industry has experienced recent growth. Mining activities in the area have also been in decline with the David Bell and Golden Giant Mines ceasing operations in 2010 and 2014, respectively.

Land use within the SSA is directed by the Town of Marathon's Official Plan and the Crown Land Use Policies. Mine exploration and development is a permitted use by both of these policies. The Official Plan includes policies that requires technical studies and designs to limit impact to natural features and to ensure development is not at risk to natural hazards. Crown Land Use policies promote resource extraction in a manner that limits conflicting use and enhances access to recreation uses, including the Pic River. Within the RSA there are several prominent nature conservation and protection/ enhancement areas including the Lake Superior Shoreline, Pukaskwa National Park and Neys Provincial Park.

Mineral exploration, hunting, trapping, bait fish harvesting, fishing, and other recreation all occur within the SSA, with Camp 19 Road being used as a snowmobile trail and as an access point to the area. A transmission line runs along the northern edge of the SSA. Notable land uses within the LSA include:

- The Marathon Airport
- Commercial and residential properties along Highway 17
- Aggregate operations along Camp 19 Road
- Cottages on Hare Lake
- The Town of Marathon Landfill



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November 13, 2020

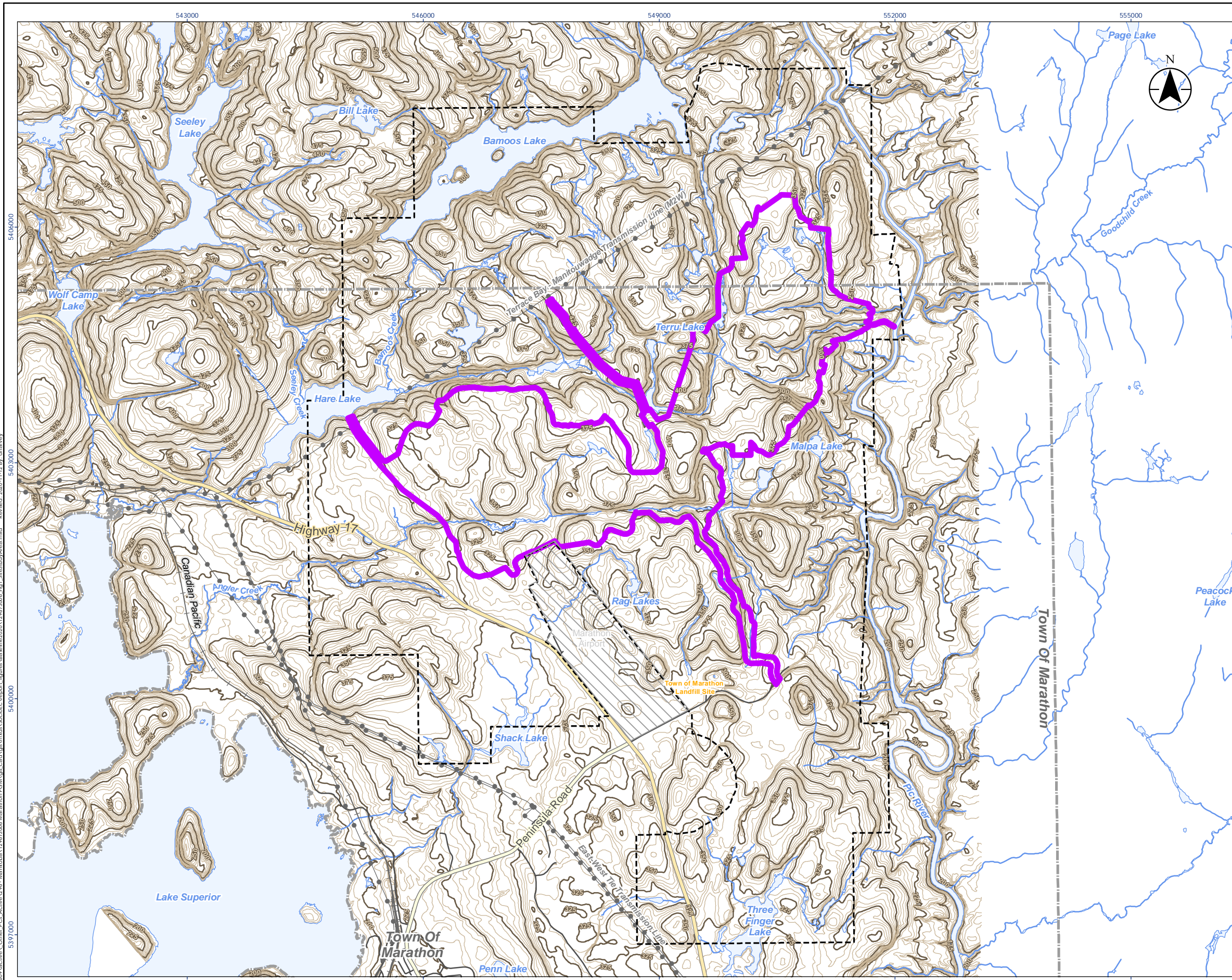
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APPENDIX A

Figures





- Legend
- Project Boundary (MLAS, MENDM Changed 2017)
 - Site Study Area Boundary
 - Topographic Contour (5 m Intervals)
 - Topographic Contour (25 m Intervals)
 - Highway
 - Major Road
 - Minor Road
 - Hydro Line
 - Railway
 - Watercourse
 - Airport
 - Municipal Boundary, Lower Tier
 - Waterbody



- Notes
1. Coordinate System: NAD 1927 UTM Zone 16N
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.

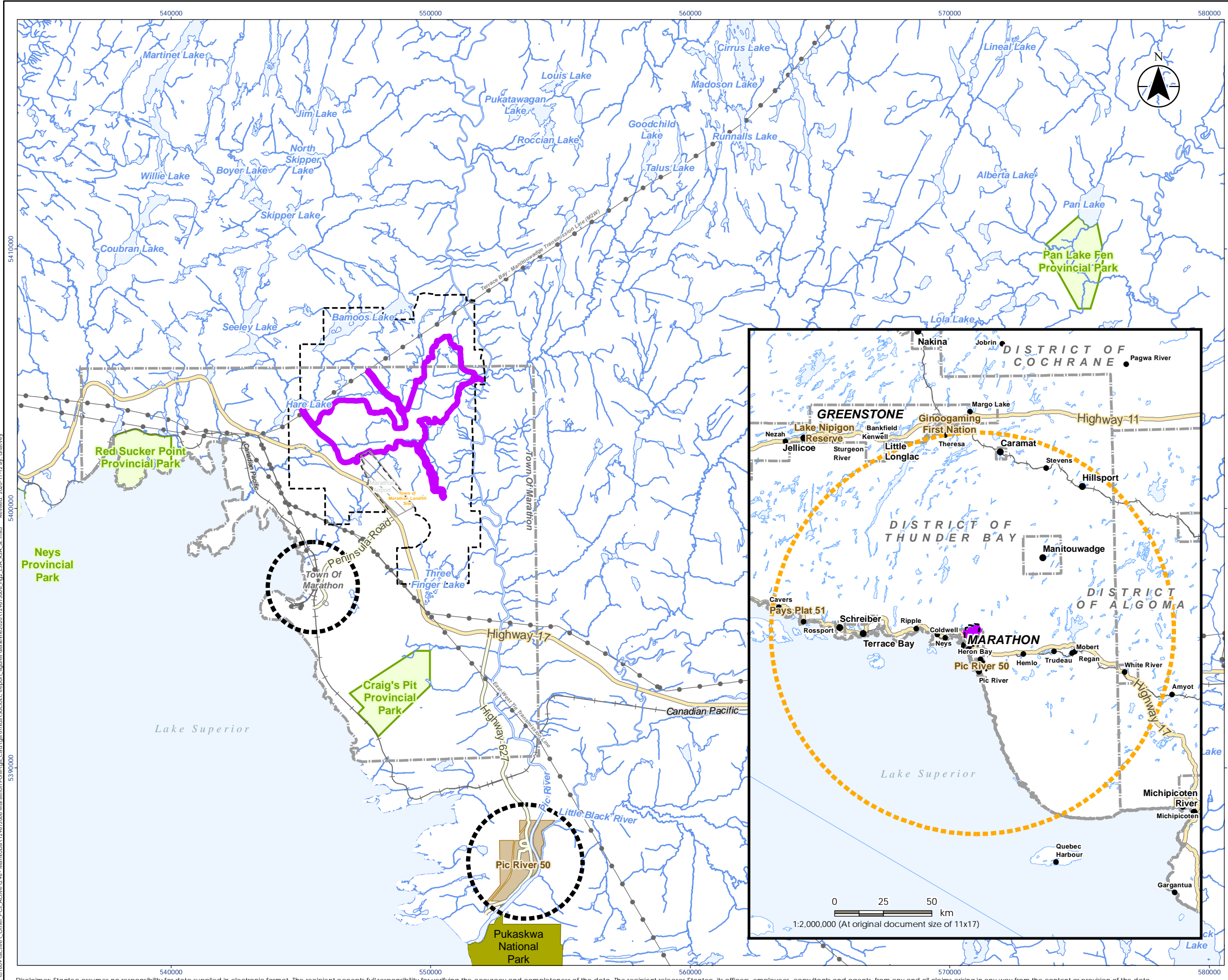


Project Location: Marathon
 Prepared by DH on 2020-11-12

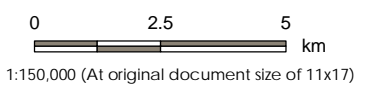
Client/Project:
GENERATION PGM INC.
MARATHON PALLADIUM PROJECT

Figure No.
1
 Title
Site Study Area

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- Legend
- Project Boundary (MLAS, MENDM Changed 2017)
 - Site Study Area Boundary
 - Local Study Area
 - Regional Study Area
 - Highway
 - Major Road
 - Hydro Line
 - Railway
 - Watercourse
 - Airport
 - Municipal Boundary, Lower Tier
 - National Park
 - Provincial Park
 - Waterbody



- Notes
1. Coordinate System: NAD 1983 UTM Zone 16N
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.



Project Location: Marathon
 Prepared by: DH on 2020-11-12

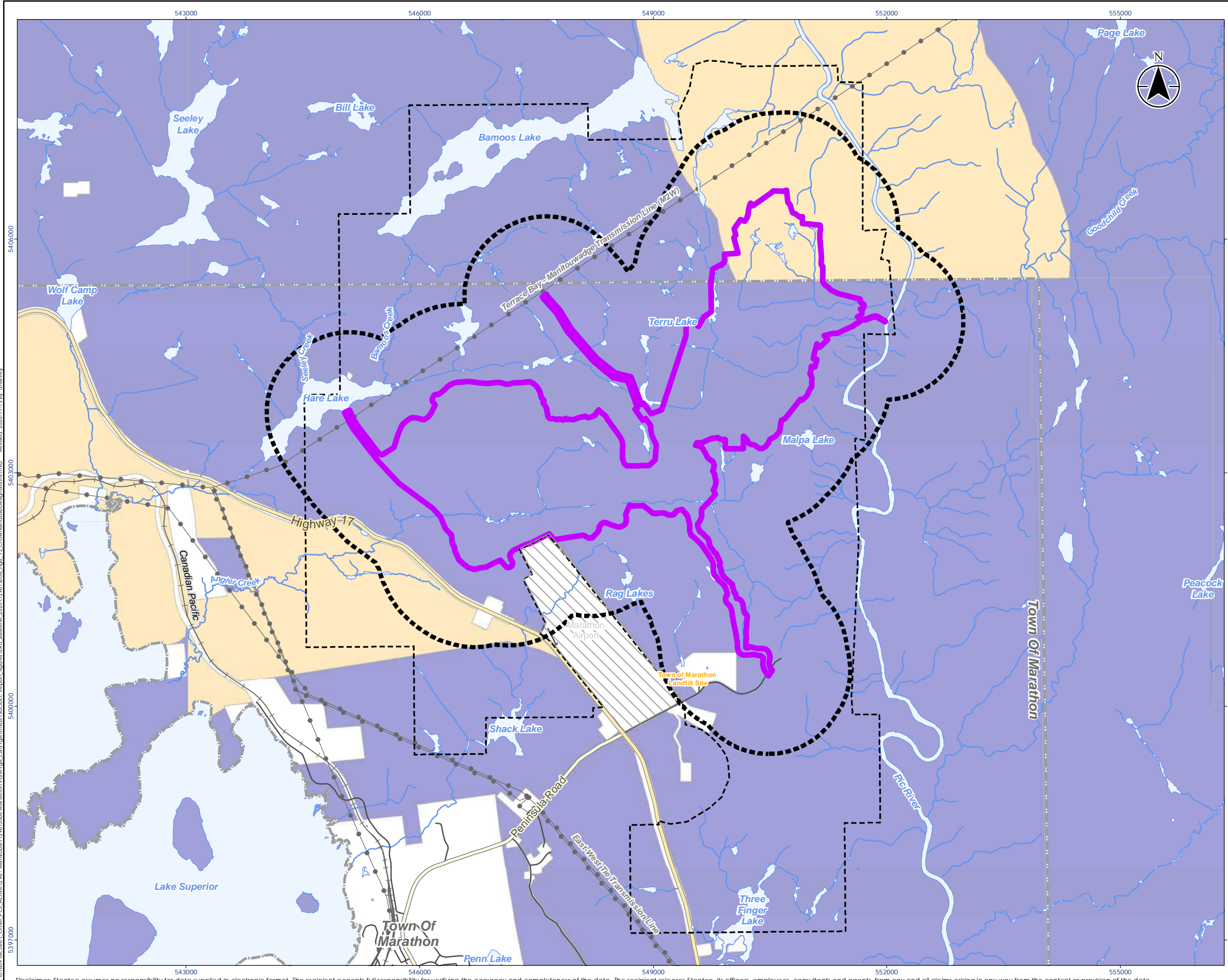
Client/Project: GENERATION PGM INC.
 MARATHON PALLADIUM PROJECT

Figure No.: 2

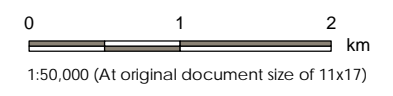
Title: Local and Regional Study Areas

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 Revised: 2020-11-12 By: dhanvey
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- Legend
- Local Study Area
 - Project Boundary (MLAS, MENDM Changed 2017)
 - Site Study Area Boundary
 - Highway
 - Major Road
 - Minor Road
 - Hydro Line
 - Railway
 - Watercourse
 - Airport
 - Municipal Boundary, Lower Tier
 - Waterbody
- Crownland Use Designation***
- Enhanced Management Area
 - General Use Area



- Notes
1. Coordinate System: NAD 1983 UTM Zone 16N
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
- * Based on the Ontario Crownland Use Policy Atlas from Land Inventory Ontario (LIO) does not include information on private land.



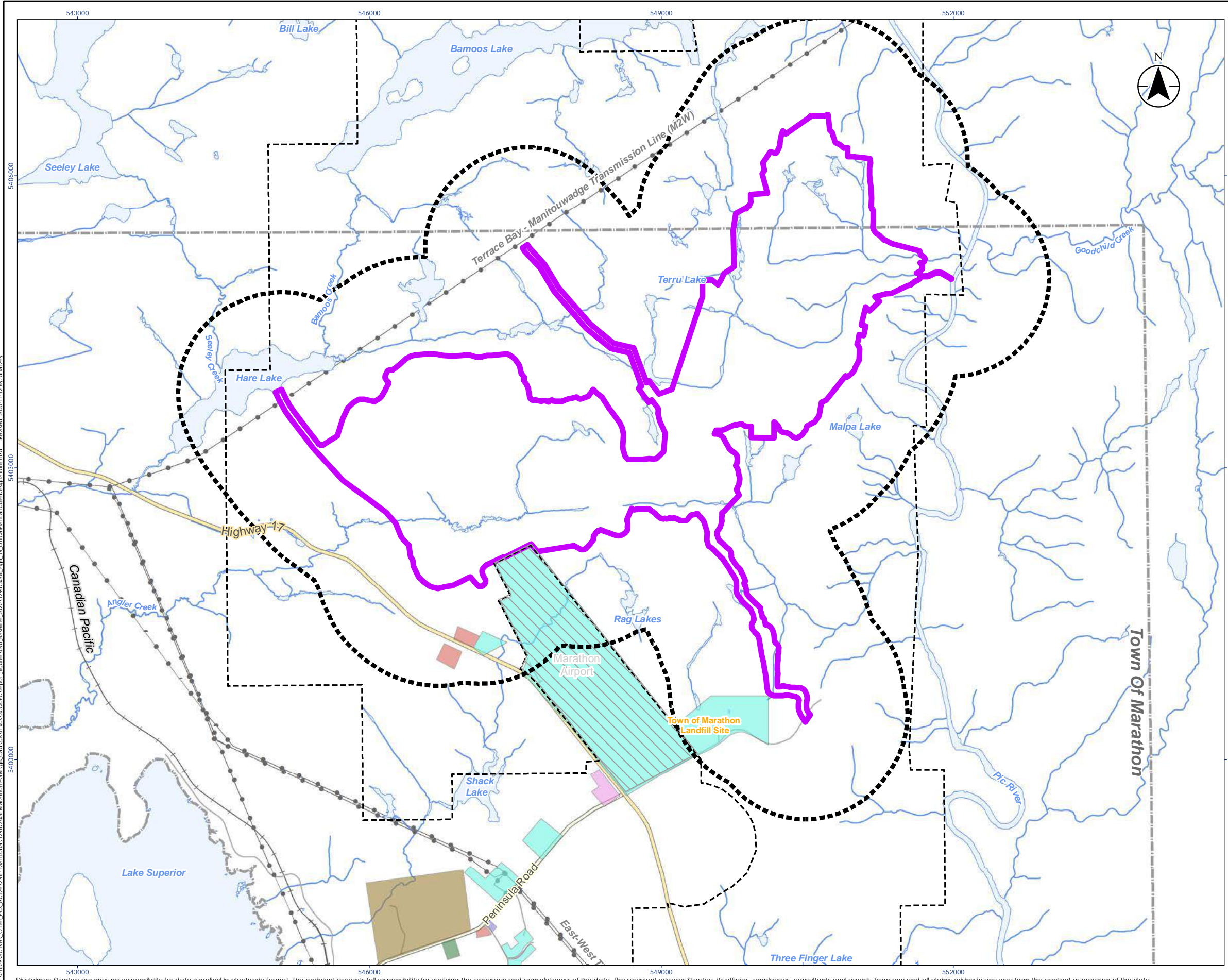
Project Location: Marathon
 Project Number: 129673006 REVA
 Prepared by: DH on 2020-11-13

Client/Project:
 GENERATION PGM INC.
 MARATHON PALLADIUM PROJECT

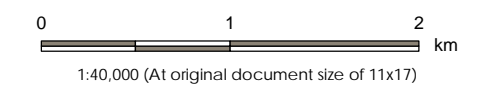
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Title:
 Crown Land Use Designations

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- Legend
- Local Study Area
 - Project Boundary (MLAS, MENDM Changed 2017)
 - Site Study Area Boundary
 - Highway
 - Major Road
 - Hydro Line
 - Railway
 - Watercourse
 - Airport
 - Municipal Boundary, Lower Tier
 - Waterbody
- Town of Marathon Land Use Designations***
- General Commercial (C2)
 - Heavy Industrial (M2)
 - Institutional (I)
 - Open Space (OS)
 - Residential 1 (R1)
 - Residential Multiple (RM-1)



Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.

* Land Use Designations have been adapted from the Town of Marathon Official Plan- Schedule A and should be considered approximate.



Project Location
Marathon

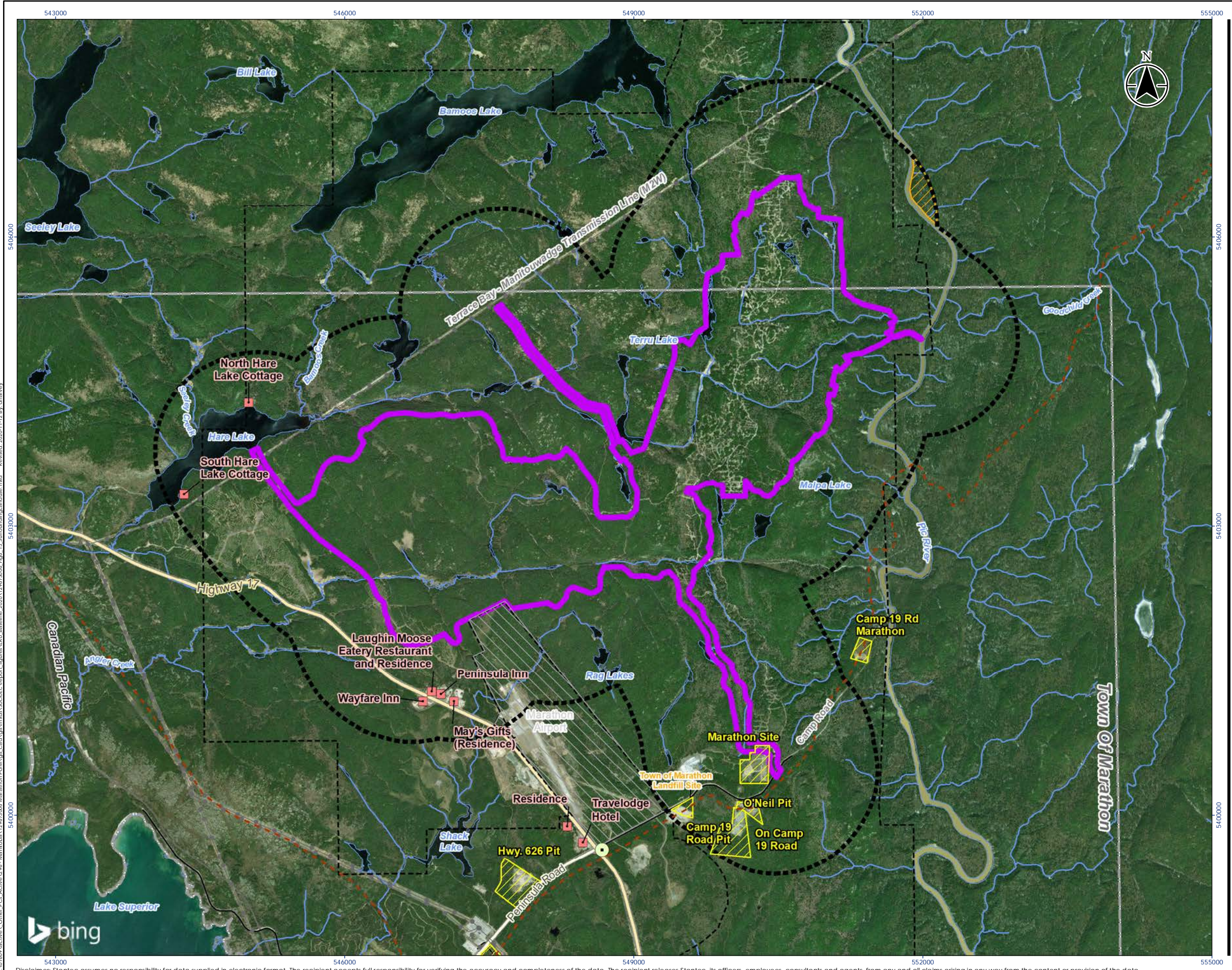
129673006 REVA
Prepared by DH on 2020-11-12

Client/Project
GENERATION PGM INC.
MARATHON PALLADIUM PROJECT

Figure No.
4

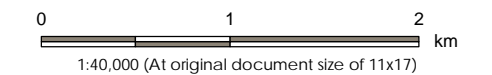
Title
Official Plan Land Use Designations

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Legend

- Local Study Area
- Project Boundary (MLAS, MENDM Changed 2017)
- Site Study Area Boundary
- Landuse Points
- Park
- Highway
- Major Road
- Hydro Line
- Railway
- Snowmobile Trail
- Watercourse
- Airport
- Active Aggregate Site
- Preferred Harvest Area (Approximate Location within LSA)*
- Municipal Boundary, Lower Tier
- Waterbody



Notes

1. Coordinate System: NAD 1983 UTM Zone 16N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2018.
3. Orthography Imagery Source: © 2020 Microsoft Corporation © 2020 Maxar © CNES (2020) Distribution Airbus DS
4. Intended to show the approximate location of the preferred harvest area within the LSA. For more details on the exact location of the preferred harvest area refer to 2019-2021 Contingency Plan Pic Forest- MU966.



Project Location
Marathon

129673006 REVA
Prepared by DH on 2020-11-12

Client/Project
GENERATION PGM INC.
MARATHON PALLADIUM PROJECT

Figure No.
5

Title
Surrounding Land Uses

APPENDIX B

Data Tables



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.1: General Labour Force Characteristics – Town of Marathon, 2016

Topic	Total Population			Indigenous Population		
	Total	Male	Female	Total	Male	Female
Population aged 15 years+	2,705	1,360	1,345	325	140	185
Labour force	1,745	940	805	220	100	120
Participation rate (%)	64.5	69.1	59.9	67.7	71.4	64.9
Employed	1,615	865	750	190	90	100
Unemployed	130	75	55	35	15	20
Unemployment rate (%)	7.4	8	6.8	15.9	15	16.7
<p>NOTES:</p> <p>¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size</p> <p>Total may not sum due to rounding.</p> <p>Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables</p> <p>SOURCE: Statistics Canada 2017, 2018</p>						

Table B.2: General Labour Force Characteristics – Manitowadge Township, 2016

Topic	Total Population			Indigenous Population		
	Total	Male	Female	Total	Male	Female
Population aged 15 years+	1,700	855	845	215	105	110
Labour force	845	470	375	80	40	40
Participation rate (%)	49.7	55	44.4	37.2	38.1	36.4
Employed	760	425	335	75	35	40
Unemployed	85	45	40	0	0	0
Unemployment rate (%)	10.1	9.6	10.7	-	-	-
<p>NOTES:</p> <p>¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size</p> <p>- Data not available</p> <p>Total may not sum due to rounding.</p> <p>Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables</p> <p>SOURCE: Statistics Canada 2017, 2018</p>						



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.3: General Labour Force Characteristics – Schreiber Township, 2016

Topic	Total Population			Indigenous Population		
	Total	Male	Female	Total	Male	Female
Population aged 15 years+	955	485	470	90	40	50
Labour force	570	300	270	50	25	25
Participation rate (%)	59.7	61.9	57.4	55.6	62.5	50
Employed	515	270	245	40	20	20
Unemployed	55	30	25	0	0	0
Unemployment rate (%)	9.6	10	9.3	-	-	-

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 - Data not available
 Total may not sum due to rounding.
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
 Statistics Canada 2017, 2018

Table B.4: General Labour Force Characteristics – Terrace Bay Township, 2016

Topic	Total Population			Indigenous Population		
	Total	Male	Female	Total	Male	Female
Population aged 15 years+	1,350	685	665	110	40	70
Labour force	835	410	425	80	25	55
Participation rate (%)	61.9	59.9	63.9	72.7	62.5	78.6
Employed	745	350	395	75	20	55
Unemployed	80	50	30	10	10	0
Unemployment rate (%)	9.6	12.2	7.1	12.5	40	-

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 - Data not available
 Total may not sum due to rounding.
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
 Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.5: General Labour Force Characteristics – Plays Plat 51 IR, 2016

Topic	Total Population			Indigenous Population		
	Total	Male	Female	Total	Male	Female
Population aged 15 years+	70	40	30	85	50	35
Labour force	45	25	20	40	25	15
Participation rate (%)	64.3	62.5	66.7	47.1	50	42.9
Employed	40	20	20	35	20	15
Unemployed	20	10	10	10	10	0
Unemployment rate (%)	44.4	40	50	25	40	-

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 - Data not available
 Total may not sum due to rounding.
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
 Statistics Canada 2017, 2018

Table B.6: General Labour Force Characteristics – Pic Moberg North IR, 2016

Topic	Total Population			Indigenous Population		
	Total	Male	Female	Total	Male	Female
Population aged 15 years+	135	65	70	120	60	60
Labour force	75	40	35	65	35	30
Participation rate (%)	55.6	61.5	50	54.2	58.3	50
Employed	50	30	20	40	25	15
Unemployed	25	10	15	25	10	15
Unemployment rate (%)	33.3	25	42.9	38.5	28.6	50

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 - Data not available
 Total may not sum due to rounding.
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
 Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.7: General Labour Force Characteristics – Pic Moberg South IR, 2016

Topic	Total Population			Indigenous Population		
	Total	Male	Female	Total	Male	Female
Population aged 15 years+	100	50	50	125	70	55
Labour force	55	30	25	50	30	20
Participation rate (%)	55	60	50	40	42.9	36.4
Employed	40	25	15	40	25	15
Unemployed	10	0	10	10	0	10
Unemployment rate (%)	18.2	-	40	20	-	50

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 - Data not available
 Total may not sum due to rounding.
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
 Statistics Canada 2017, 2018

Table B.8: General Labour Force Characteristics – Pic River 50 IR, 2016

Topic	Total Population			Indigenous Population		
	Total	Male	Female	Total	Male	Female
Population aged 15 years+	325	155	170	305	150	155
Labour force	185	90	95	175	90	85
Participation rate (%)	56.9	58.1	55.9	57.4	60	54.8
Employed	155	75	80	140	70	70
Unemployed	30	15	15	30	15	15
Unemployment rate (%)	16.2	16.7	15.8	17.1	16.7	17.6

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 Total may not sum due to rounding.
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
 Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.9: General Labour Force Characteristics – White River Township, 2016

Topic	Total Population			Indigenous Population		
	Total	Male	Female	Total	Male	Female
Population aged 15 years+	560	315	245	175	65	110
Labour force	350	205	145	90	45	45
Participation rate (%)	62.5	65.1	59.2	51.4	69.2	40.9
Employed	335	190	145	95	45	50
Unemployed	10	10	0	0	0	0
Unemployment rate (%)	2.9	4.9	-	-	-	-

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
- Data not available
Total may not sum due to rounding.
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.10: Labour Force by Sector – Town of Marathon, 2016

NIACS	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
11	Agriculture, forestry, fishing and hunting	15	15	-	-	-	-
21	Mining, quarrying, and oil and gas extraction	415	380	35	30	30	-
22	Utilities	10	10	-	-	-	-
23	Construction	95	80	15	25	15	10
31-33	Manufacturing	60	50	10	-	-	-
41	Wholesale trade	25	25	-	-	-	-
44-45	Retail trade	250	100	150	35	10	25
48-49	Transportation and warehousing	35	25	10	10	10	-
51	Information and cultural industries	10	-	10	-	-	-
52	Finance and insurance	35	10	25	10	-	10
53	Real estate and rental and leasing	20	10	10	-	-	-
54	Professional, scientific and technical services	20	20	-	-	-	-
55	Management of companies and enterprises	-	-	-	-	-	-
56	Administrative and support, waste management and remediation services	20	10	10	-	-	-
61	Educational services	210	45	165	15	-	15
62	Health care and social assistance	155	15	140	20	-	20
71	Arts, entertainment and recreation	45	20	25	20	10	10
72	Accommodation and food services	150	40	110	10	-	10
81	Other services (except public administration)	55	20	35	-	-	-
91	Public administration	115	60	55	25	10	15
Not classified under NAICS		20	20	-	-	-	-
Total		1,760	955	805	200	85	115

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 - Data not available
 Total may not sum due to rounding.
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
 Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.11: Labour Force by Sector – Manitouwadge Township, 2016

NIACS	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
11	Agriculture, forestry, fishing and hunting	70	60	10	-	-	-
21	Mining, quarrying, and oil and gas extraction	195	175	20	15	15	-
22	Utilities	-	-	-	-	-	-
23	Construction	35	35	-	-	-	-
31-33	Manufacturing	10	10	-	-	-	-
41	Wholesale trade	10	10	-	-	-	-
44-45	Retail trade	115	45	70	15	-	15
48-49	Transportation and warehousing	25	25	-	10	10	-
51	Information and cultural industries	15	-	15	-	-	-
52	Finance and insurance	10	-	10	10	-	10
53	Real estate and rental and leasing	-	-	-	-	-	-
54	Professional, scientific and technical services	-	-	-	-	-	-
55	Management of companies and enterprises	-	-	-	-	-	-
56	Administrative and support, waste management and remediation services	10	10	-	-	-	-
61	Educational services	70	10	60	10	-	10
62	Health care and social assistance	90	10	80	-	-	-
71	Arts, entertainment and recreation	20	10	10	-	-	-
72	Accommodation and food services	50	10	40	15	-	15
81	Other services (except public administration)	35	15	20	-	-	-
91	Public administration	55	30	25	-	-	-
Not classified under NAICS		10	10	-	-	-	-
Total		825	465	360	75	25	50

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
- Data not available
Total may not sum due to rounding.
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.12: Labour Force by Sector – Schreiber Township, 2016

NIACS	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
11	Agriculture, forestry, fishing and hunting	10	-	10	-	-	-
21	Mining, quarrying, and oil and gas extraction	10	10	-	-	-	-
22	Utilities	10	10	-	-	-	-
23	Construction	15	15	-	-	-	-
31-33	Manufacturing	85	65	20	10	10	-
41	Wholesale trade	-	-	-	-	-	-
44-45	Retail trade	100	65	35	-	-	-
48-49	Transportation and warehousing	85	75	10	-	-	-
51	Information and cultural industries	-	-	-	-	-	-
52	Finance and insurance	15	-	15	-	-	-
53	Real estate and rental and leasing	10	-	10	-	-	-
54	Professional, scientific and technical services	-	-	-	-	-	-
55	Management of companies and enterprises	-	-	-	-	-	-
56	Administrative and support, waste management and remediation services	10	10	-	10	10	-
61	Educational services	65	10	55	-	-	-
62	Health care and social assistance	55	-	55	-	-	-
71	Arts, entertainment and recreation	-	-	-	-	-	-
72	Accommodation and food services	45	-	45	10	-	10
81	Other services (except public administration)	35	20	15	10	-	10
91	Public administration	35	25	10	-	-	-
Not classified under NAICS		-	-	-	-	-	-
Total		585	305	280	40	20	20
<p>NOTES:</p> <p>¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size</p> <p>- Data not available</p> <p>Total may not sum due to rounding.</p> <p>Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables</p> <p>SOURCE:</p> <p>Statistics Canada 2017, 2018</p>							



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.13: Labour Force by Sector – Terrace Bay Township, 2016

NIACS	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
11	Agriculture, forestry, fishing and hunting	10	-	10	-	-	-
21	Mining, quarrying, and oil and gas extraction	-	-	-	-	-	-
22	Utilities	-	-	-	-	-	-
23	Construction	30	30	-	10	10	-
31-33	Manufacturing	250	205	45	20	10	10
41	Wholesale trade	-	-	-	-	-	-
44-45	Retail trade	65	20	45	20	10	10
48-49	Transportation and warehousing	70	50	20	10	10	-
51	Information and cultural industries	10	10	-	-	-	-
52	Finance and insurance	20	10	10	-	-	-
53	Real estate and rental and leasing	-	-	-	-	-	-
54	Professional, scientific and technical services	20	10	10	-	-	-
55	Management of companies and enterprises	10	-	10	-	-	-
56	Administrative and support, waste management and remediation services	20	10	10	-	-	-
61	Educational services	85	10	75	-	-	-
62	Health care and social assistance	120	20	100	15	-	15
71	Arts, entertainment and recreation	-	-	-	-	-	-
72	Accommodation and food services	45	-	45	10	-	10
81	Other services (except public administration)	10	-	10	10	-	10
91	Public administration	60	25	35	15	-	15
Not classified under NAICS		10	10	-	-	-	-
Total		835	410	425	110	40	70

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
- Data not available
Total may not sum due to rounding.
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.14: Labour Force by Sector – Plays Plat 51 IR, 2016

NIACS	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
11	Agriculture, forestry, fishing and hunting	-	-	-	-	-	-
21	Mining, quarrying, and oil and gas extraction	-	-	-	-	-	-
22	Utilities	-	-	-	10	10	-
23	Construction	-	-	-	-	-	-
31-33	Manufacturing	-	-	-	-	-	-
41	Wholesale trade	-	-	-	-	-	-
44-45	Retail trade	10	10	-	10	-	10
48-49	Transportation and warehousing	-	-	-	-	-	-
51	Information and cultural industries	-	-	-	-	-	-
52	Finance and insurance	-	-	-	-	-	-
53	Real estate and rental and leasing	-	-	-	-	-	-
54	Professional, scientific and technical services	-	-	-	-	-	-
55	Management of companies and enterprises	-	-	-	-	-	-
56	Administrative and support, waste management and remediation services	10	10	-	-	-	-
61	Educational services	-	-	-	-	-	-
62	Health care and social assistance	10	-	10	-	-	-
71	Arts, entertainment and recreation	-	-	-	-	-	-
72	Accommodation and food services	-	-	-	-	-	-
81	Other services (except public administration)	-	-	-	-	-	-
91	Public administration	10	10	-	10	10	-
Not classified under NAICS		-	-	-	-	-	-
Total		40	30	10	30	20	10

NOTES:

¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size

- Data not available

Total may not sum due to rounding.

Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:

Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.15: Labour Force by Sector – Pic Mobert North IR, 2016

NAICS	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
11	Agriculture, forestry, fishing and hunting	-	-	-	10	10	-
21	Mining, quarrying, and oil and gas extraction	10	10	-	-	-	-
22	Utilities	-	-	-	-	-	-
23	Construction	10	-	10	-	-	-
31-33	Manufacturing	10	-	10	-	-	-
41	Wholesale trade	-	-	-	-	-	-
44-45	Retail trade	10	10	-	-	-	-
48-49	Transportation and warehousing	-	-	-	-	-	-
51	Information and cultural industries	-	-	-	-	-	-
52	Finance and insurance	-	-	-	-	-	-
53	Real estate and rental and leasing	-	-	-	-	-	-
54	Professional, scientific and technical services	-	-	-	-	-	-
55	Management of companies and enterprises	-	-	-	-	-	-
56	Administrative and support, waste management and remediation services	10	10	-	10	10	-
61	Educational services	-	-	-	-	-	-
62	Health care and social assistance	10	-	10	-	-	-
71	Arts, entertainment and recreation	-	-	-	-	-	-
72	Accommodation and food services	-	-	-	-	-	-
81	Other services (except public administration)	-	-	-	-	-	-
91	Public administration	10	10	-	10	10	-
Not classified under NAICS		10	-	10	-	-	-
Total		80	40	40	30	30	-

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
- Data not available
Total may not sum due to rounding.
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.16: Labour Force by Sector – Pic Mobert South IR, 2016

NIACS	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
11	Agriculture, forestry, fishing and hunting	-	-	-	10	-	10
21	Mining, quarrying, and oil and gas extraction	-	-	-	10	10	-
22	Utilities	-	-	-	-	-	-
23	Construction	-	-	-	-	-	-
31-33	Manufacturing	-	-	-	-	-	-
41	Wholesale trade	-	-	-	-	-	-
44-45	Retail trade	-	-	-	20	10	10
48-49	Transportation and warehousing	-	-	-	-	-	-
51	Information and cultural industries	-	-	-	-	-	-
52	Finance and insurance	-	-	-	-	-	-
53	Real estate and rental and leasing	-	-	-	-	-	-
54	Professional, scientific and technical services	10	-	10	-	-	-
55	Management of companies and enterprises	-	-	-	-	-	-
56	Administrative and support, waste management and remediation services	10	10	-	10	-	10
61	Educational services	-	-	-	-	-	-
62	Health care and social assistance	10	10	-	10	-	10
71	Arts, entertainment and recreation	-	-	-	-	-	-
72	Accommodation and food services	-	-	-	-	-	-
81	Other services (except public administration)	-	-	-	-	-	-
91	Public administration	20	10	10	10	10	-
Not classified under NAICS		-	-	-	-	-	-
Total		50	30	20	70	30	40

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
- Data not available
Total may not sum due to rounding.
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.17: Labour Force by Sector – Pic River 50 IR, 2016

NIACS	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
11	Agriculture, forestry, fishing and hunting	20	10	10	20	10	10
21	Mining, quarrying, and oil and gas extraction	25	25	-	35	25	10
22	Utilities	10	10	-	10	10	-
23	Construction	-	-	-	10	10	-
31-33	Manufacturing	-	-	-	10	10	-
41	Wholesale trade	-	-	-	-	-	-
44-45	Retail trade	-	-	-	10	-	10
48-49	Transportation and warehousing	10	10	-	-	-	-
51	Information and cultural industries	-	-	-	-	-	-
52	Finance and insurance	-	-	-	-	-	-
53	Real estate and rental and leasing	-	-	-	10	10	-
54	Professional, scientific and technical services	-	-	-	-	-	-
55	Management of companies and enterprises	-	-	-	-	-	-
56	Administrative and support, waste management and remediation services	-	-	-	-	-	-
61	Educational services	10	-	10	-	-	-
62	Health care and social assistance	45	-	45	50	10	40
71	Arts, entertainment and recreation	10	10	-	-	-	-
72	Accommodation and food services	-	-	-	10	10	-
81	Other services (except public administration)	-	-	-	-	-	-
91	Public administration	35	15	20	30	15	15
Not classified under NAICS		-	-	-	10	10	-
Total		165	80	85	205	120	85
<p>NOTES:</p> <p>¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size</p> <p>- Data not available</p> <p>Total may not sum due to rounding.</p> <p>Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables</p> <p>SOURCE: Statistics Canada 2017, 2018</p>							



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.18: Labour Force by Sector – White River Township, 2016

NIACS	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
11	Agriculture, forestry, fishing and hunting	25	25	-	-	-	-
21	Mining, quarrying, and oil and gas extraction	35	35	-	-	-	-
22	Utilities	10	10	-	-	-	-
23	Construction	35	25	10	20	10	10
31-33	Manufacturing	30	30	-	10	10	-
41	Wholesale trade	30	30	-	10	10	-
44-45	Retail trade	30	15	15	-	-	-
48-49	Transportation and warehousing	25	15	10	15	15	-
51	Information and cultural industries	-	-	-	10	-	10
52	Finance and insurance	-	-	-	-	-	-
53	Real estate and rental and leasing	-	-	-	-	-	-
54	Professional, scientific and technical services	-	-	-	-	-	-
55	Management of companies and enterprises	-	-	-	-	-	-
56	Administrative and support, waste management and remediation services	-	-	-	10	-	10
61	Educational services	10	-	10	10	-	10
62	Health care and social assistance	20	-	20	10	-	10
71	Arts, entertainment and recreation	-	-	-	-	-	-
72	Accommodation and food services	25	10	15	-	-	-
81	Other services (except public administration)	20	10	10	-	-	-
91	Public administration	25	-	25	10	-	10
Not classified under NAICS		-	-	-	-	-	-
Total		320	205	115	105	45	60
<p>NOTES:</p> <p>¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size</p> <p>- Data not available</p> <p>Total may not sum due to rounding.</p> <p>Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables</p> <p>SOURCE: Statistics Canada 2017, 2018</p>							



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.19: Labour Force by Broad Occupational Category – Town of Marathon, 2016

NOC	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
0	Management occupations	205	105	100	25	10	15
1	Business, finance and administration occupations	150	20	130	20	10	10
2	Natural and applied sciences and related occupations	120	110	10	10	-	10
3	Health occupations	55	15	40	-	-	-
4	Occupations in education, law and social, community and government services	220	65	155	25	10	15
5	Occupations in art, culture, recreation and sport	25	-	25	10	-	10
6	Sales and service occupations	410	125	285	60	10	50
7	Trades, transport and equipment operators and related occupations	285	255	30	35	35	-
8	Natural resources, agriculture and related production occupations	220	190	30	30	20	10
9	Occupations in manufacturing and utilities	45	35	10	-	-	-
Not included in standard NOC classification		25	15	10	-	-	-
Total¹		1,760	935	825	215	95	120

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
- Data not available
Total may not sum due to rounding.
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.20: Labour Force by Broad Occupational Category – Manitowadge Township, 2016

NOC	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
0	Management occupations	75	55	20	10	-	10
1	Business, finance and administration occupations	95	20	75	-	-	-
2	Natural and applied sciences and related occupations	15	15	-	-	-	-
3	Health occupations	75	20	55	10	-	10
4	Occupations in education, law and social, community and government services	80	20	60	-	-	-
5	Occupations in art, culture, recreation and sport	-	-	-	-	-	-
6	Sales and service occupations	190	40	150	25	-	25
7	Trades, transport and equipment operators and related occupations	160	150	10	10	10	-
8	Natural resources, agriculture and related production occupations	145	145	-	15	15	-
9	Occupations in manufacturing and utilities	10	10	-	-	-	-
Not included in standard NOC classification		10	10	-	-	-	-
Total¹		855	485	370	70	25	45
<p>NOTES:</p> <p>¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size</p> <p>- Data not available</p> <p>Total may not sum due to rounding.</p> <p>Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables</p> <p>SOURCE: Statistics Canada 2017, 2018</p>							



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.21: Labour Force by Broad Occupational Category – Schreiber Township, 2016

NOC	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
0	Management occupations	60	40	20	-	-	-
1	Business, finance and administration occupations	55	10	45	-	-	-
2	Natural and applied sciences and related occupations	15	15	-	-	-	-
3	Health occupations	25	-	25	-	-	-
4	Occupations in education, law and social, community and government services	80	15	65	10	-	10
5	Occupations in art, culture, recreation and sport	-	-	-	-	-	-
6	Sales and service occupations	145	45	100	15	-	15
7	Trades, transport and equipment operators and related occupations	135	125	10	10	10	-
8	Natural resources, agriculture and related production occupations	10	10	-	10	10	-
9	Occupations in manufacturing and utilities	45	35	10	10	10	-
Not included in standard NOC classification		-	-	-	-	-	-
Total¹		570	295	275	55	30	25
<p>NOTES:</p> <p>¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size</p> <p>- Data not available</p> <p>Total may not sum due to rounding.</p> <p>Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables</p> <p>SOURCE: Statistics Canada 2017, 2018</p>							



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.22: Labour Force by Broad Occupational Category – Terrace Bay Township, 2016

NOC	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
0	Management occupations	65	35	30	-	-	-
1	Business, finance and administration occupations	85	25	60	-	-	-
2	Natural and applied sciences and related occupations	35	25	10	-	-	-
3	Health occupations	60	15	45	10	-	10
4	Occupations in education, law and social, community and government services	115	20	95	25	10	15
5	Occupations in art, culture, recreation and sport	10	-	10	-	-	-
6	Sales and service occupations	160	25	135	10	-	10
7	Trades, transport and equipment operators and related occupations	180	150	30	20	10	10
8	Natural resources, agriculture and related production occupations	-	-	-	-	-	-
9	Occupations in manufacturing and utilities	110	110	-	10	10	-
Not included in standard NOC classification		10	10	-	-	-	-
Total¹		830	415	415	75	30	45
<p>NOTES:</p> <p>¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size</p> <p>- Data not available</p> <p>Total may not sum due to rounding.</p> <p>Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables</p> <p>SOURCE: Statistics Canada 2017, 2018</p>							



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.23: Labour Force by Broad Occupational Category – Plays Plat 51 IR, 2016

NOC	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
0	Management occupations	10	-	10	-	-	-
1	Business, finance and administration occupations	10	10	-	-	-	-
2	Natural and applied sciences and related occupations	-	-	-	-	-	-
3	Health occupations	-	-	-	-	-	-
4	Occupations in education, law and social, community and government services	20	10	10	-	-	-
5	Occupations in art, culture, recreation and sport	10	-	10	10	-	10
6	Sales and service occupations	-	-	-	-	-	-
7	Trades, transport and equipment operators and related occupations	10	10	-	10	10	-
8	Natural resources, agriculture and related production occupations	-	-	-	10	10	-
9	Occupations in manufacturing and utilities	-	-	-	-	-	-
Not included in standard NOC classification		-	-	-	-	-	-
Total¹		60	30	30	30	20	10
<p>NOTES:</p> <p>¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size</p> <p>- Data not available</p> <p>Total may not sum due to rounding.</p> <p>Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables</p> <p>SOURCE: Statistics Canada 2017, 2018</p>							



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.24: Labour Force by Broad Occupational Category – Pic Moberg North IR, 2016

NOC	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
0	Management occupations	-	-	-	-	-	-
1	Business, finance and administration occupations	10	10	-	10	10	-
2	Natural and applied sciences and related occupations	-	-	-	-	-	-
3	Health occupations	-	-	-	-	-	-
4	Occupations in education, law and social, community and government services	10	-	10	10	-	10
5	Occupations in art, culture, recreation and sport	-	-	-	-	-	-
6	Sales and service occupations	20	10	10	-	-	-
7	Trades, transport and equipment operators and related occupations	15	15	-	25	15	10
8	Natural resources, agriculture and related production occupations	10	10	-	10	10	-
9	Occupations in manufacturing and utilities	10	10	-	-	-	-
Not included in standard NOC classification		20	10	10	20	10	10
Total¹		95	65	30	75	45	30
<p>NOTES:</p> <p>¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size</p> <p>- Data not available</p> <p>Total may not sum due to rounding.</p> <p>Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables</p> <p>SOURCE: Statistics Canada 2017, 2018</p>							



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.25: Labour Force by Broad Occupational Category – Pic Moberg South IR, 2016

NOC	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
0	Management occupations	-	-	-	-	-	-
1	Business, finance and administration occupations	-	-	-	-	-	-
2	Natural and applied sciences and related occupations	-	-	-	-	-	-
3	Health occupations	-	-	-	-	-	-
4	Occupations in education, law and social, community and government services	-	-	-	-	-	-
5	Occupations in art, culture, recreation and sport	-	-	-	-	-	-
6	Sales and service occupations	20	10	10	20	10	10
7	Trades, transport and equipment operators and related occupations	10	10	-	10	10	-
8	Natural resources, agriculture and related production occupations	10	10	-	10	10	-
9	Occupations in manufacturing and utilities	-	-	-	-	-	-
Not included in standard NOC classification		10	-	10	10	-	10
Total¹		50	30	20	50	30	20

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
- Data not available
Total may not sum due to rounding.
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.26: Labour Force by Broad Occupational Category – Pic River 50 IR, 2016

NOC	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
0	Management occupations	10	10	-	10	-	10
1	Business, finance and administration occupations	25	-	25	35	10	25
2	Natural and applied sciences and related occupations	10	10	-	-	-	-
3	Health occupations	15	-	15	15	-	15
4	Occupations in education, law and social, community and government services	35	10	25	35	10	25
5	Occupations in art, culture, recreation and sport	-	-	-	-	-	-
6	Sales and service occupations	20	10	10	20	10	10
7	Trades, transport and equipment operators and related occupations	30	30	-	30	30	-
8	Natural resources, agriculture and related production occupations	20	20	-	15	15	-
9	Occupations in manufacturing and utilities	10	10	-	-	-	-
Not included in standard NOC classification		20	10	10	20	10	10
Total¹		195	110	85	180	85	95
<p>NOTES:</p> <p>¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size</p> <p>- Data not available</p> <p>Total may not sum due to rounding.</p> <p>Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables</p> <p>SOURCE: Statistics Canada 2017, 2018</p>							



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.27: Labour Force by Broad Occupational Category – White River Township, 2016

NOC	Sector	Total Labour Force			Indigenous Labour Force		
		Total	Male	Female	Total	Male	Female
0	Management occupations	20	10	10	-	-	-
1	Business, finance and administration occupations	60	-	60	20	-	20
2	Natural and applied sciences and related occupations	10	10	-	-	-	-
3	Health occupations	10	-	10	10	-	10
4	Occupations in education, law and social, community and government services	25	10	15	10	-	10
5	Occupations in art, culture, recreation and sport	10	-	10	-	-	-
6	Sales and service occupations	50	20	30	15	-	15
7	Trades, transport and equipment operators and related occupations	110	110	-	45	45	-
8	Natural resources, agriculture and related production occupations	15	15	-	-	-	-
9	Occupations in manufacturing and utilities	25	25	-	10	10	-
Not included in standard NOC classification		-	-	-	-	-	-
Total ¹		335	200	135	110	55	55
<p>NOTES:</p> <p>¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size</p> <p>- Data not available</p> <p>Total may not sum due to rounding.</p> <p>Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables</p> <p>SOURCE: Statistics Canada 2017, 2018</p>							



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.28: Educational Attainment – Town of Marathon, 2016

Topic	Total Population				Indigenous ¹ Population			
	Total		Male (%)	Female (%)	Total		Male (%)	Female (%)
	Number	%			Number	%		
No certificate, diploma or degree	570	21.0	48.2	51.8	75	23.4	40.0	60.0
Secondary (high) school diploma or equivalency certificate	710	26.2	45.8	54.2	90	28.1	50.0	50.0
Apprenticeship or trades certificate or diploma	365	13.5	82.2	17.8	20	6.3	100.0	0.0
College, CEGEP or other non-university certificate or diploma	730	26.9	43.2	56.8	105	32.8	33.3	66.7
University certificate or diploma below bachelor level	20	0.7	0.0	100.0	0	0.0	0.0	0.0
University certificate, diploma or degree at bachelor level or above	315	11.6	44.4	55.6	30	9.4	33.3	66.7
Total	2,710	100.0			320	100.0		

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
Total may not sum due to rounding.
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables.
Data is presented for persons aged 15 years and older (aligns with statistics on labour force status).

SOURCES:
Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.29: Educational Attainment – Manitouwadge Township, 2016

Topic	Total Population				Indigenous ¹ Population			
	Total		Male (%)	Female (%)	Total		Male (%)	Female (%)
	Number	%			Number	%		
No certificate, diploma or degree	480	28.2	51.0	49.0	40	28.6	25.0	75.0
Secondary (high) school diploma or equivalency certificate	395	23.2	48.1	51.9	40	28.6	62.5	37.5
Apprenticeship or trades certificate or diploma	275	16.2	80.0	20.0	30	21.4	100.0	0.0
College, CEGEP or other non-university certificate or diploma	355	20.9	42.3	57.7	20	14.3	50.0	50.0
University certificate or diploma below bachelor level	45	2.6	44.4	55.6	10	7.1	0.0	100.0
University certificate, diploma or degree at bachelor level or above	150	8.8	23.3	76.7	0	0.0	0.0	0.0
Total	1,700	100.0			140	100.0		

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
Total may not sum due to rounding.
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables.
Data is presented for persons aged 15 years and older (aligns with statistics on labour force status).

SOURCES:
Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.30: Educational Attainment – Schreiber Township, 2016

Topic	Total Population				Indigenous ¹ Population			
	Total		Male (%)	Female (%)	Total		Male (%)	Female (%)
	Number	%			Number	%		
No certificate, diploma or degree	195	20.6	56.4	43.6	20	25.0	50.0	50.0
Secondary (high) school diploma or equivalency certificate	285	30.2	45.6	54.4	20	25.0	50.0	50.0
Apprenticeship or trades certificate or diploma	145	15.3	72.4	27.6	10	12.5	100.0	0.0
College, CEGEP or other non-university certificate or diploma	210	22.2	45.2	54.8	20	25.0	50.0	50.0
University certificate or diploma below bachelor level	10	1.1	0.0	100.0	10	12.5	100.0	0.0
University certificate, diploma or degree at bachelor level or above	100	10.6	35.0	65.0	0	0.0	0.0	0.0
Total	945	100.0			80	100.0		

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
Total may not sum due to rounding.
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables.
Data is presented for persons aged 15 years and older (aligns with statistics on labour force status).

SOURCES:
Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.31: Educational Attainment – Terrace Bay Township, 2016

Topic	Total Population				Indigenous ¹ Population			
	Total		Male (%)	Female (%)	Total		Male (%)	Female (%)
	Number	%			Number	%		
No certificate, diploma or degree	205	15.1	46.3	53.7	30	28.6	50.0	50.0
Secondary (high) school diploma or equivalency certificate	385	28.4	49.4	50.6	35	33.3	42.9	57.1
Apprenticeship or trades certificate or diploma	170	12.5	76.5	23.5	0	0.0	0.0	0.0
College, CEGEP or other non-university certificate or diploma	395	29.2	45.6	54.4	30	28.6	33.3	66.7
University certificate or diploma below bachelor level	10	0.7	0.0	100.0	0	0.0	0.0	0.0
University certificate, diploma or degree at bachelor level or above	190	14.0	50.0	50.0	10	9.5	0.0	100.0
Total	1,355	100.0			105	100.0		

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
Total may not sum due to rounding.
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables.
Data is presented for persons aged 15 years and older (aligns with statistics on labour force status).

SOURCES:
Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.32: Educational Attainment – Plays Plat 51 IR, 2016

Topic	Total Population				Indigenous ¹ Population			
	Total		Male (%)	Female (%)	Total		Male (%)	Female (%)
	Number	%			Number	%		
No certificate, diploma or degree	15	25.0	100.0	0.0	25	35.7	60.0	40.0
Secondary (high) school diploma or equivalency certificate	10	16.7	100.0	0.0	25	35.7	60.0	40.0
Apprenticeship or trades certificate or diploma	10	16.7	100.0	0.0	10	14.3	100.0	0.0
College, CEGEP or other non-university certificate or diploma	25	41.7	40.0	60.0	10	14.3	0.0	100.0
University certificate or diploma below bachelor level	0	0.0	0.0	0.0	0	0.0	0.0	0.0
University certificate, diploma or degree at bachelor level or above	0	0.0	0.0	0.0	0	0.0	0.0	0.0
Total	60	100.0			70	100.0		

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
Total may not sum due to rounding.
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables.
Data is presented for persons aged 15 years and older (aligns with statistics on labour force status).

SOURCES:
Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.33: Educational Attainment – Pic Mobert North IR, 2016

Topic	Total Population				Indigenous ¹ Population			
	Total		Male (%)	Female (%)	Total		Male (%)	Female (%)
	Number	%			Number	%		
No certificate, diploma or degree	90	81.8	50.0	50.0	90	75.0	50.0	50.0
Secondary (high) school diploma or equivalency certificate	20	18.2	50.0	50.0	10	8.3	100.0	0.0
Apprenticeship or trades certificate or diploma	0	0.0	0.0	0.0	10	8.3	100.0	0.0
College, CEGEP or other non-university certificate or diploma	0	0.0	0.0	0.0	10	8.3	0.0	100.0
University certificate or diploma below bachelor level	0	0.0	0.0	0.0	0	0.0	0.0	0.0
University certificate, diploma or degree at bachelor level or above	0	0.0	0.0	0.0	0	0.0	0.0	0.0
Total	110	100.0			120	100.0		

NOTES:

¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size

Total may not sum due to rounding.

Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables.

Data is presented for persons aged 15 years and older (aligns with statistics on labour force status).

SOURCES:

Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.34: Educational Attainment – Pic Mobert South IR, 2016

Topic	Total Population				Indigenous ¹ Population			
	Total		Male (%)	Female (%)	Total		Male (%)	Female (%)
	Number	%			Number	%		
No certificate, diploma or degree	50	50.0	50.0	50.0	50	55.6	50.0	50.0
Secondary (high) school diploma or equivalency certificate	20	20.0	50.0	50.0	20	22.2	50.0	50.0
Apprenticeship or trades certificate or diploma	0	0.0	0.0	0.0	0	0.0	0.0	0.0
College, CEGEP or other non-university certificate or diploma	20	20.0	50.0	50.0	20	22.2	50.0	50.0
University certificate or diploma below bachelor level	0	0.0	0.0	0.0	0	0.0	0.0	0.0
University certificate, diploma or degree at bachelor level or above	10	10.0	0.0	100.0	0	0.0	0.0	0.0
Total	100	100.0			90	100.0		

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
Total may not sum due to rounding.
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables.
Data is presented for persons aged 15 years and older (aligns with statistics on labour force status).

SOURCES:
Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.35: Educational Attainment – Pic River 50 IR, 2016

Topic	Total Population				Indigenous ¹ Population			
	Total		Male (%)	Female (%)	Total		Male (%)	Female (%)
	Number	%			Number	%		
No certificate, diploma or degree	100	30.3	50.0	50.0	90	27.7	50.0	50.0
Secondary (high) school diploma or equivalency certificate	70	21.2	57.1	42.9	70	21.5	57.1	42.9
Apprenticeship or trades certificate or diploma	35	10.6	71.4	28.6	20	6.2	100.0	0.0
College, CEGEP or other non-university certificate or diploma	110	33.3	36.4	63.6	105	32.3	33.3	66.7
University certificate or diploma below bachelor level	0	0.0	0.0	0.0	20	6.2	50.0	50.0
University certificate, diploma or degree at bachelor level or above	15	4.5	0.0	100.0	20	6.2	50.0	50.0
Total	330	100.0			325	100.0		

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
Total may not sum due to rounding.
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables.
Data is presented for persons aged 15 years and older (aligns with statistics on labour force status).

SOURCES:
Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.36: Educational Attainment – White River Township, 2016

Topic	Total Population				Indigenous ¹ Population			
	Total		Male (%)	Female (%)	Total		Male (%)	Female (%)
	Number	%			Number	%		
No certificate, diploma or degree	140	25.0	60.7	39.3	50	37.0	60.0	40.0
Secondary (high) school diploma or equivalency certificate	145	25.9	41.4	58.6	15	11.1	0.0	100.0
Apprenticeship or trades certificate or diploma	120	21.4	79.2	20.8	35	25.9	71.4	28.6
College, CEGEP or other non-university certificate or diploma	120	21.4	45.8	54.2	35	25.9	28.6	71.4
University certificate or diploma below bachelor level	20	3.6	50.0	50.0	0	0.0	0.0	0.0
University certificate, diploma or degree at bachelor level or above	15	2.7	100.0	0.0	0	0.0	0.0	0.0
Total	560	100.0			135	100.0		

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
Total may not sum due to rounding.
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables.
Data is presented for persons aged 15 years and older (aligns with statistics on labour force status).

SOURCES:
Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.37: Individual Income – Town of Marathon, 2016

Topic		Total Income			Indigenous Population ¹		
		Total	Male	Female	Total	Male	Female
Total Income	Median	38,000	57,984	25,472	32,798	46,709	23,016
	Mean	49,857	64,845	34,348	40,845	54,219	30,501
Employment Income	Median	38,144	66,560	22,400	29,337	53,911	18,477
	Mean	51,767	67,202	33,960	38,891	54,350	27,160

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
 Statistics Canada 2017, 2018

Table B.38: Individual Income – Manitouwadge Township, 2016

Topic		Total Income			Indigenous Population ¹		
		Total	Male	Female	Total	Male	Female
Total Income	Median	29,824	47,744	20,843	21,996	41,050	19,978
	Mean	45,447	61,883	27,963	40,276	54,698	24,827
Employment Income	Median	33,408	72,192	16,224	28,242	39,569	-
	Mean	49,622	65,274	28,056	43,980	55,019	-

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 - Data not available
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
 Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.39: Individual Income – Schreiber Township, 2016

Topic		Total Income			Indigenous Population ¹		
		Total	Male	Female	Total	Male	Female
Total Income	Median	37,120	54,016	22,016	12,844	64,041	11,044
	Mean	43,231	56,257	29,892	37,714	61,957	18,290
Employment Income	Median	32,960	52,608	21,056	8,651	56,647	6,198
	Mean	40,784	51,468	28,627	32,314	47,722	14,889

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 - Data not available
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
 Statistics Canada 2017, 2018

Table B.40: Individual Income – Terrace Bay Township, 2016

Topic		Total Income			Indigenous Population ¹		
		Total	Male	Female	Total	Male	Female
Total Income	Median	42,138	57,280	29,216	34,111	34,300	33,567
	Mean	49,502	59,451	39,068	39,254	47,605	34,290
Employment Income	Median	39,808	60,288	26,656	26,153	-	43,285
	Mean	45,869	57,083	33,926	33,123	-	32,351

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 - Data not available
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
 Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.41: Individual Income – Plays Plat 51 IR, 2016

Topic		Total Income			Indigenous Population ¹		
		Total	Male	Female	Total	Male	Female
Total Income	Median	-	-	-	-	-	-
	Mean	-	-	-	-	-	-
Employment Income	Median	-	-	-	-	-	-
	Mean	-	-	-	-	-	-

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 - Data not available
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
 Statistics Canada 2017, 2018

Table B.42: Individual Income – Pic Mobert North IR, 2016

Topic		Total Income			Indigenous Population ¹		
		Total	Male	Female	Total	Male	Female
Total Income	Median	-	-	-	-	-	-
	Mean	-	-	-	-	-	-
Employment Income	Median	-	-	-	-	-	-
	Mean	-	-	-	-	-	-

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 - Data not available
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
 Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.43: Individual Income – Pic Moberg South IR, 2016

Topic		Total Income			Indigenous Population ¹		
		Total	Male	Female	Total	Male	Female
Total Income	Median	-	-	-	-	-	-
	Mean	-	-	-	-	-	-
Employment Income	Median	-	-	-	-	-	-
	Mean	-	-	-	-	-	-

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 - Data not available
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
 Statistics Canada 2017, 2018

Table B.44: Individual Income – Pic River 50 IR, 2016

Topic		Total Income			Indigenous Population ¹		
		Total	Male	Female	Total	Male	Female
Total Income	Median	24,160	28,160	23,283	23,456	27,008	23,232
	Mean	35,253	42,608	28,401	34,210	41,797	26,881
Employment Income	Median	31,296	35,328	25,920	30,048	33,792	22,384
	Mean	37,036	48,136	26,637	36,310	47,637	25,097

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
 - Data not available
 Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
 Statistics Canada 2017, 2018



**MARATHON PALLADIUM PROJECT
SOCIO-ECONOMIC AND CURRENT RESOURCE USE UPDATED BASELINE REPORT**

Table B.45: Individual Income – White River Township, 2016

Topic		Total Income			Indigenous Population ¹		
		Total	Male	Female	Total	Male	Female
Total Income	Median	38,496	50,261	26,144	43,022	51,897	31,659
	Mean	45,800	55,085	33,524	42,659	51,523	35,233
Employment Income	Median	38,997	53,056	22,208	46,627	61,486	22,521
	Mean	42,305	50,645	30,319	41,460	51,251	30,756

NOTES:
¹ Indigenous and non-Indigenous totals may not sum to equal total population counts as they are based on a 25% population sample size
- Data not available
Values shown in "Total" columns are the sum of male and female CSD subsets taken from Statistics Canada's 2016 Census Profile (Census of the Population). Due to Statistics Canada rounding (Statistics Canada 2019a) totals may not exactly align with those shown on CSD Census Profiles and may not sum across tables

SOURCE:
Statistics Canada 2017, 2018

