

WAASIGAN

FINAL ENVIRONMENTAL ASSESSMENT Section 7.1 Land and Resource Use November 2023



Acknowledgements

We wish to acknowledge that the Waasigan Transmission Line Project is located within lands that represent the traditional territories and homelands of the Robinson-Superior Treaty (1850) First Nations and Treaty #3 (1873), and traverse the Red Sky Métis Independent Nation, Northwestern Ontario Métis Community and Northern Lake Superior Métis Community.

Hydro One also wishes to acknowledge Indigenous artist, Storm Angeconeb, for developing the covering page and wildlife designs throughout the Final Environmental Assessment. Storm is a highly recognized visual artist from Lac Seul First Nation in Treaty #3 and currently resides in Red Lake. Many of her works include animals and birds as representations of herself or those close to her. The artist's description of the covering page is presented below.

Hydro One Environmental Study Art:

What stands out in this art piece is the symbolic representation of solar rays as "Bringing Power"; we can see the environment represented through the wildlife and Ojibwe floral visuals. This artwork is an excellent representation of Hope, Life, and Opportunity, visually portrayed through the Black Bear and her two cubs. The colour theme of this artwork comes from the Waasigan Transmission Line Project brand identity.

Artist: Storm Angeconeb

Final Environmental Assessment Report copyright © 2023 Hydro One Networks Inc.







Table of Contents

7.1	Non-Indigenous Land and Resource Use	7.1-1
7.1.1	Input from Engagement	7.1-1
7.1.2	Information Sources	7.1-3
7.1.3	Criteria and Indicators	7.1-4
7.1.4	Assessment Boundaries	
7.1.4.1	Temporal Boundaries	
7.1.4.2	Spatial Boundaries	
7.1.5	Description of the Existing Environment	7.1-19
7.1.6	Baseline Data Collection Methods	7.1-19
7.1.7	Baseline Conditions	7.1-19
7.1.7.1	Provincial Parks, Conservation Reserves, Areas of Natural and S Interest, and Enhanced Management Areas	cientific 7.1-19
7.1.7.2	Land Use Planning	7.1-55
7.1.7.3	Forestry Resources	7.1-117
7.1.7.4	Mining Resources	7.1-129
7.1.7.5	Aggregate Resources	7.1-139
7.1.7.6	Hunting, Trapping, and Fishing	7.1-146
7.1.7.7	Recreation and Commercial Tourism	7.1-172
7.1.7.8	Navigation	7.1-190
7.1.8	Potential Project-Environmental Interactions	7.1-197
7.1.9	Potential Effects, Mitigation Measures, and Net Effects	7.1-203
7.1.9.1	Parks and Protected Areas	7.1-203
7.1.9.2	Land Use Planning	7.1-209
7.1.9.3	Forestry Resource Use	7.1-215
7.1.9.4	Mining Resource Use	7.1-217
7.1.9.5	Aggregate Resources	7.1-219
7.1.9.6	Hunting, Trapping, and Fishing	7.1-220
7.1.9.7	Recreation and Commercial Tourism	7.1-223
7.1.9.8	Navigation	7.1-228
7.1.9.9	Summary of Potential Effects, Impact Measures, and Predicted N Effects	et 7.1-229



7.1.10	Net Effects Characterization	
7.1.10.1	Net Effects Characterization Approach	
7.1.10.2	Net Effects Characterization	
7.1.10.3	Assessment of Significance	
7.1.11	Cumulative Effects Assessment	
7.1.11.1	Assessment of Cumulative Effects	
7.1.11.2	Cumulative Effects Characterization	
7.1.11.3	Assessment of Significance	
7.1.12	Monitoring	
7.1.13	Prediction Confidence in the Assessment	
7.1.14	Criteria Summary	
References		

Tables

Table 7.1-1:	Summary of Comment Themes Raised During Engagement
Table 7.1-2:	Non-Indigenous Land and Resource Use Criteria and Indicators
Table 7.1-3:	Spatial Boundaries7.1-14
Table 7.1-4:	Provisions for Utility Infrastructure in Parks and Protected Areas in the Project Footprint
Table 7.1-5:	Parks and Protected Areas in the Study Areas
Table 7.1-6:	Ministry of Transportation Designated Lands in the Study Areas
Table 7.1-7:	CLUPA Land Use Designations in the Project Footprint
Table 7.1-8:	Applicable CLUPA Policy Report Details in the Project Footprint
Table 7.1-9:	Non-Freehold Disposition and Unpatented Crown Lands in the Study Areas
Table 7.1-10:	Municipal Boundaries for Settlements in the Study Areas
Table 7.1-11:	Official Plan Policies Related to the Project Footprint
Table 7.1-12:	Municipal Land Use Zoning in the Study Areas for the City of Dryden 7.1-104
Table 7.1-13:	Municipal Land Use Zoning in the Study Areas for the City of Thunder Bay
Table 7.1-14:	Municipal Land Use Zoning in the Study Areas for the Municipality of Oliver Paipoonge
Table 7.1-15:	Municipal Land Use Zoning in the Study Areas for the Municipality of Shuniah



Table 7.1-16:	Municipal Land Use Zoning in the Study Areas for the Town of Atikokan 7.1- 110
Table 7.1-17:	Municipal Land Use Zoning in the Study Areas for the Township of Conmee
Table 7.1-18:	Municipal Land Use Zoning in the Study Areas for the Township of Ignace7.1-112
Table 7.1-19:	Unincorporated/Unorganized Municipalities, Townships, and Districts that intersect both the Project ROW and the LSA
Table 7.1-20:	Forest Management Units and Harvest Area in the Study Areas
Table 7.1-21:	Forest Processing Facilities in the Study Areas7.1-121
Table 7.1-22:	Mining Resources in the Study Areas
Table 7.1-23:	Active and Pending Mining Claims in the Study Areas
Table 7.1-24:	Aggregate Resources in the Study Areas
Table 7.1-25:	Aggregate Pits, Associated Infrastructure, and Aggregate Designated Areas in the Study Areas7.1-141
Table 7.1-26:	Wildlife Management Units in the Study Areas
Table 7.1-27:	Firearm Hunting Regulations for Wildlife Management Units in the Study Areas (2022)7.1-154
Table 7.1-28:	Moose Hunters and Harvest by Wildlife Management Unit (2016 to 2022) 7.1- 156
Table 7.1-29:	Deer Hunter and Harvest Data by Wildlife Management Unit (2016 to 2022)
Table 7.1-30:	Bear Hunters and Harvest by Wildlife Management Unit (2016 to 2022)7.1-161
Table 7.1-31:	Trapline License Areas in the Study Areas
Table 7.1-32:	Fisheries Management Zones in the Study Areas
Table 7.1-33:	Fishing Seasons by Fisheries Management Zone, 2021 to 2022
Table 7.1-34:	Outdoor Tourism and Recreation Features in the Study Areas
Table 7.1-35:	Ontario Trail Network Trail Frequency and Area in the Study Areas 7.1-186
Table 7.1-36:	Non-Ontario Trail Network Trail Frequency and Area in the Study Areas 7.1- 187
Table 7.1-37:	Project-Environment Interactions for Non-Indigenous Land and Resource Use
Table 7.1-38:	Potential Effects, Mitigation Measures, and Predicted Net Effects for Non-Indigenous Land and Resource Use Criteria
Table 7.1-39:	Magnitude Effect Levels for Land and Resource Use Indicators
Table 7.1-40:	Characterization of Predicted Net Effects for Land and Resource Use 7.1-247
Table 7.1-41:	Reasonably Foreseeable Developments that Overlap with the Non- Indigenous Land and Resource Use Regional Study Area



Table 7.1-42:	Summary of Cumulative Effects Interactions for Non-Indigenous Land and Resource Use	7.1-259
Table 7.1-43:	Characterization of Cumulative Effects for Non-Indigenous Land and Resource Use	7.1-261
Table 7.1-44:	Non-Indigenous Land and Resource Use Assessment Summary	7.1-263

Figures

Figure 7.1-1:	Project Footprint, Local Study Area, and Regional Study Area
Figure 7.1-2:	Protected Areas in the Study Areas
Figure 7.1-3:	Land Use Planning in the Study Areas
Figure 7.1-4: For	estry Features in the Study Areas
Figure 7.1-5:	Mineral Resource Activities in the Regional Study Area 7.1-13
Figure 7.1-6:	Aggregate Resources in the Regional Study Area 7.1-14
Figure 7.1-7:	Hunting, Trapping, and Fishing in the Regional Study Area 7.1-14
Figure 7.1-8:	Outdoor Tourism and Recreational Land Use in the Study Areas 7.1-18
Figure 7.1-9:	Navigation Activities in the Study Areas









7.1 Non-Indigenous Land and Resource Use

Wemitigoozhiwaki gaye Gaayaabajitooyang

This section describes the assessment of the effects of the Waasigan Transmission Line Project (the Project) on non-Indigenous land and resource use. Non-Indigenous land and resource use refers to the use of lands and their resources for commercial and non-commercial purposes, such as mining and aggregates, hunting, trapping, fishing, recreation and tourism activities. Non-Indigenous land and resource use also refers to the formal designation of lands, either through federal, provincial or municipal authorities, as areas of specific use (e.g., residential, industrial or as parks and protected areas). The assessment follows the general approach and concepts described in Section 5.0.

Indigenous land and resource uses are addressed in Section 7.7 (First Nations Rights) and in Section 7.8 (Métis Rights).

7.1.1 Input from Engagement

Comments pertaining to non-Indigenous land and resource use that were raised by Indigenous communities, the general public and stakeholders during engagement, and how the issues were addressed in the environmental assessment (EA), are set out in Table 7.1-1. Comments and responses are provided in the Engagement Summary (Section 4.0). In addition, the Draft EA Report was provided to Indigenous communities, government officials and agencies, and interested persons and organizations for review and comment on May 17, 2023. A high-level summary of the key themes from the comments on the Draft EA Report and related engagement meetings are included in Table 7.1-1. The detailed responses to these comments are included in Appendix 4.0-A.

Comment Theme		How Addressed in the Environmental Assessment		Indigenous Community or Stakeholder	
•	Potential increase of recreational vehicle traffic along the transmission right-of- way.	 Recreational activities, including snowmobiling, are not permitted on Hydro One ROWs unless it is agreed to by the property owner and deemed compatible by Hydro One. 	•	Members of the public	
•	Concerns regarding effects to tourism.	 Potential effects related to recreation and commercial tourism are assessed and appropriate mitigation measures are identified in this EA section. 	•	Members of the public	

|--|





Comment Theme		How Addressed in the Environmental Assessment		Indigenous Community or Stakeholder	
•	Concerns regarding compensation for property owners.	 Potential effects related to changes to current land use are assessed and mitigation measures are identified in this EA section. This includes the Land Acquisition Compensation Program that Hydro One will implement for directly affected property owners. 	•	Members of the public	
•	The Northwestern Ontario Métis Community (NWOMC) and Region 2 identified cultural features within parks and protected areas, which were collected as part of the Traditional Knowledge and Land Use Study for the Waasigan Transmission Line Project.	 Section 7.1.7.1.2 (Protected Areas Within the Study Areas) was updated to include the additional information provided from NWOMC and Region 2 and now includes the cultural features identified by the NWOMC and Region 2. The magnitude rating was also revised based on feedback from NWOMC and Region 2. 	•	NWOMC and Region 2	
•	Concerns regarding trespassing and the potential for increased unauthorized access.	 Addition of a mitigation measure to consider installing fencing to limit unauthorized access. 	•	Members of the public	
•	Recommendation for clarification about whether aesthetics and viewscapes were considered in certain Provincial Park areas and how visual impacts on the wilderness canoeing experience is considered.	 The Final EA Report includes additional details regarding the visibility of the Project within protected areas and effects to the viewscapes for backcountry canoeists. Section 7.4 (Visual Aesthetics) and 7.1 (Land and Resource Use) also include mitigation measures related to the consideration of viewscapes for campers and recreational users within parks and protected areas within the Project footprint and LSA. 	•	Ontario Parks	
•	Clarification on restrictions regarding the use of herbicides in parks and protected areas.	 Management of vegetation within the ROW will be required for safe operation of the transmission line; however, herbicides will not be used during construction of the Project or for future maintenance of this transmission line. 	•	Ontario Parks	



	Comment Theme	How Addressed in the Environmental Assessment		Indigenous Community or Stakeholder
•	Request to add a new criterion to reflect the impacts to the forestry industry and activities.	 Section 7.1 (Land and Resource Use) of the EA now includes a Forest Resource Use criterion and an assessment of change in access to forestry resources and lands available for forestry-related activities. 	•	Ministry of Natural Resources and Forestry
•	Request for additional information to be included in the EA for the Crown Land Use Policy Atlas (CLUPA) and Lake Trout Lakes	 Section 7.1.7.2.2.6 (Crown Land Policy) of the EA provides an overview on Crown Land Use Policy, the CLUPA and policy areas that overlap with the ROW and Project footprint. 	•	Ministry of Natural Resources and Forestry
	Area of Concern.	 Section 7.1.7.4 of the EA contains regulatory context for trout lakes, in addition to mitigation measures in Section 7.1.9.8 (Potential Effects, Mitigation Measures, and Net Effects). 		

EA = environmental assessment; Métis Nation of Ontario = MNO; ROW = right-of-way.

7.1.2 Information Sources

Information for the non-Indigenous land and resource use baseline was obtained from the following sources:

- Spatial data available through the Ministry of Natural Resources and Forestry (MNRF) Land Information Ontario (LIO), and Dillon (MNRF 2022h);
- Federal, and provincial and municipal legislation and regulatory data (provided in the regional existing conditions sections, where relevant);
- Provincial parks and protected area management plans and management statements;
- Qualitative and spatial data and qualitative data provided by the MNRF in relation to parks and protected areas (e.g., resource inventories, checklists, field study notes);
- Provincial websites and reports on parks and protected areas; and
- Public engagement activities, user group websites and reports on tourism and recreation activities.

For the purposes of the EA, sufficient information was deemed to be available from the references listed above to assess the potential effects of the Project on non-Indigenous land and resource use.



7.1.3 Criteria and Indicators

Criteria are components of the environment that are considered to have economic, social, biological, conservation, aesthetic, or ethical value (Section 5.0). Indicators are an aspect or characteristic of a criterion that, if changed as a result of the Project, may demonstrate a physical, biological or socio-economic effect.

The criteria and indicators for non-Indigenous land and resource use were initially outlined in the Draft Terms of Reference (ToR). Feedback from Indigenous communities, government officials and agencies, and interested persons and organizations received during engagement was incorporated into the preliminary criteria and indicators approved in the Amended ToR.

The following criteria were identified for non-Indigenous land and resource use:

- Provincial Parks, Conservation Reserves, Areas of Natural and Scientific Interest, and Enhanced Management Areas refers to parks and protected areas formally recognized and protected by federal, provincial, and municipal governments based on their natural, cultural and recreational value, such as provincial parks and provincial nature reserves, conservation reserves, areas natural and scientific interest (ANSIs) (earth and life science) including candidate areas, and enhanced management areas in the Project footprint.
- Land Use Planning: Includes the lands designated for recreational, residential, institutional or commercial purposes. This criterion includes an indicator to account for a potential in the change of current land use. This was identified as a concern from a community group called Neighbours on the Line and by local residents in the Kaministiquia area.
 - Note: changes to planned expansions or developments in the study area (i.e., new or planned Project applications) have been considered and addressed in Section 9.0 (Cumulative Effects) of this EA, in the context of overlapping effects with reasonably foreseeable developments (RFDs).
- Forestry Resource Use: Refers to the use of land for forestry resource extraction and harvesting for commercial or industrial purposes, change in access to forestry resources and lands available for forestry-related activities.
- Mining Resource Use: Refers to the use of the land for natural resource extraction and harvesting for commercial or industrial purposes, change in access to mining resources, mining claims, active and planned mines and their associated infrastructure in the study area, as well as inactive mines.
- Aggregate Resources: Refers to the use of the land for aggregate resource extraction for commercial or industrial purposes, including aggregate pits and associated infrastructure in the study area, areas of high potential for aggregate resources in the Project footprint, and the anticipated volume of sources of aggregate for the Project.



- Hunting, Trapping, and Fishing: Includes the outdoor use of the land for hunting, trapping, and fishing purposes, whether commercial or recreational.
- Recreation and Commercial Tourism: Refers to the outdoor use of the land for recreation and tourism activities and purposes, including natural outdoor features, recreational and tourism infrastructure, amenities and services, used by recreationalists, visitors, and their service providers.
- Navigation: refers to the use of navigable watercourses for recreational or commercial purposes.

The Amended ToR also included the need for amendments to existing land use policy to accommodate the Project footprint, as well as the ability to conform with local and provincial land use policies as separate indicators for land use planning. Both of these indicators are similarly aligned with the presence of lands designated for recreational, residential, institutional or commercial purposes in the Project footprint and therefore have been combined into one simplified indicator titled, "Change and conformance to land use planning."

Forestry resource use was included as a criterion in the Final EA based on feedback obtained during the Draft EA from MNRF.

In addition, the Amended ToR included an indicator for "Change to planned projects in the study area (project applications)". Planned projects are included as part of the RFDs included in Section 9.0 (Cumulative Effects Summary). A cumulative effects assessment is completed for each criterion, where appropriate, based on the methodology outlined in Section 5.7; therefore, this indicator was removed from the land use assessment.

The criteria and indicators selected for the assessment of Project effects on non-Indigenous land and resource use and the rationale for their selection, are provided in Table 7.1-2.







Criteria	Rationale	Indicators	Measurement of Potential Effects
 Provincial Parks; Conservation Reserves; ANSIs; and Enhanced Management Areas. 	 Commitment to avoid or minimize adverse effects to: Provincially designated areas; Critical landform/vegetation within designated areas; Existing park values and activities; Existing conservation reserve values and activities; and Other related existing values and activities. 	 Change to protected areas including: Provincial parks and provincial nature reserves in the Project footprint; Conservation reserves in the Project footprint; ANSIs (earth and life science), including candidate areas, in the Project footprint; and Other ecologically sensitive areas in the Project footprint. 	 The potential effects to protected areas are measured quantitatively by calculating the area affected by the Project footprint, through the use of land use mapping. The potential effects are also assessed qualitatively through assessment of change in environmental conditions (e.g., air quality, noise, water quality, visual aesthetics) and cultural and recreational values that might change users' experience, along with protected areas users' access.
 Provincial Parks; Conservation Reserves; ANSIs; and Enhanced Management Areas. 	 Need to conform with the policy direction and maintain the objectives of the provincial parks crossed by the Project footprint or seek amendments. 	 Ability to conform with the policy direction and maintain the management objectives of the provincial parks and protected areas crossed by the Project footprint. 	 For provincial parks, a qualitative assessment of the combined above effects is conducted to determine if the above combined effects could compromise the policy direction and objectives of the parks.

 Table 7.1-2:
 Non-Indigenous Land and Resource Use Criteria and Indicators



Criteria	Rationale	Indicators Measurement of Potential Effects
 Land Use Planning 	 Commitment to avoid or minimize land use conflicts and incompatibilities with existing and planned land uses. Need to conform with provincial policy and official plans or seek amendments. 	 Change and conformance to land use planning. Change to current land use. Qualitative assessment of current and planned future land uses. Qualitative assessment of changes potentially required in land use policy and planning.
 Forestry Resource Use 	 Feedback received during the Draft EA process regarding the importance of forestry resources and forestry-related activities in the Project study areas. Commitment to avoid or minimize adverse effects to forestry resource use. 	 Change to access and availability of forestry resources considering: Forest management units crossed by the Project footprint; and Available and planned harvest volume. Potential effects are measured quantitatively and qualitatively based on the potential for changes to available harvest area, as well as changes to access and access management strategies.
 Mining Resource Use 	 Commitment to maintain access for significant exploration and mining activities. Abandoned mines could pose human health and/or constructability issues, as well as wildlife habitat. 	 Change in access to mining resources considering: Proximity to mining claims in the study area; Proximity to active and planned mines, and associated infrastructure (i.e., mine access roads), Quantitative assessment of change in area and access to mining resources. The potential effects are measured by calculating the area of mining claims, area and planned mines, and associated infrastructure (i.e., mine access roads),



Criteria	Rationale	Indicators	Measurement of Potential Effects
		in the study area; and Proximity of inactive (abandoned) mines in the study area.	
Aggregate Resources	 Commitment to avoid or minimize adverse effects, and enhance positive effects, by identifying active aggregate sources local to the Project. Commitment to maintain access to significant aggregate activities. 	 Change in availability of aggregate resources in the study area considering: Proximity to aggregate pits and associated infrastructure (e.g., access roads) in the study area; Area (ha) of high potential for aggregate resources in the Project footprint; and Anticipated volume and sources of aggregate required for the Project. 	 Quantitative assessment of change in area and access to aggregate resources. The potential effects are measured by calculating the area of aggregate pits and associated infrastructure and known areas of high potential for aggregate resources affected by the Project footprint, using land use mapping. The potential effects of aggregate required for the Project on aggregate resources in the study area will also be assessed quantitatively using land use mapping if volume and sources of aggregate required for the Project are available.



	Criteria	Rationale	Indicators Measurement of Potential Effects
• Hunti and F	ing, Trapping ⁻ishing	 Feedback from the public and local communities regarding the importance of hunting, trapping and fishing. Commitment to avoid or minimize adverse effects to resource harvesting. 	 Changes to hunting, trapping, and fishing in the study area considering: Wildlife Management Units crossed by the Project footprint; Proximity to traplines in the study area; Number and types of hunting licences in the study area; and Waterbody features used for recreational fishing in the Project footprint. Quantitative assessment of change in area and access to traplines, hunting areas and waterbody features for recreational fishing. Qualitative assessment of change in area and access to traplines, hunting areas and waterbody features for recreational fishing.
• Recru	eation and mercial Tourism	 Commitment to avoid or minimize adverse effects and disturbances to: Tourism-related businesses and activities; Recreational and tourism- related areas of concern and related activities; Recreational cabins and cottages, and related activities/land uses; Recreational trails and related activities, including access points for 	 Change to recreation and commercial tourism considering: Proximity to outpost camps in the study area; Proximity to areas of concern associated with tourism and Quantitative assessment of change in area and access to recreational and commercial outdoor tourism features (e.g., outpost camps, cabins and cottages, recreational trails, canoe routes, etc.) by calculating the area affected by the Project footprint and, if possible, the number of affected features, using land use mapping. Qualitative assessment of change to recreational and commercial outdoor tourism values within the area (e.g., outpost camps, cabins and cottages, recreational trails, canoe routes, etc.).



Criteria	Rationale	Indicators	Measurement of Potential Effects
	recreational activities (e.g., trail heads, fishing access points, etc.); Campgrounds and/or users; Golf courses and users; and Other recreational features.	 recreation in the study area; Proximity to cabins and cottages in the study area; Proximity to recreational trails and access points in the study area; Proximity to other recreational features, including canoe routes, backcountry campsites, shore launch sites, boat launches in the study area; Proximity to campgrounds in the study area; and Proximity to golf courses in the study area. 	



Criteria	Rationale	Indicators	Measurement of Potential Effects
 Navigation 	 Commitment to avoid or minimize interference with navigation and navigation safety. 	 Change to navigation considering: Navigable watercourses crossed by the Project footprint; and Types and timing of watercourse crossings to be used or constructed. 	 Quantitative assessment of change in area and access to navigable watercourses. The potential effects are measured by calculating the area of navigable watercourses and watercourse crossings affected by the Project footprint, using land use mapping. Qualitative assessment of changes in navigation.

Note: ANSI = Area of Natural and Scientific Interest; ha = hectares; IK = Indigenous Knowledge.





7.1.4 Assessment Boundaries

7.1.4.1 Temporal Boundaries

The Project is planned to occur in three stages:

- **Construction stage**: The period from the start of construction to the start of operation (in-service date).
- **Operation and maintenance stage**: The period from the start of operation and maintenance activities through to the end of the Project life.
- **Retirement stage**: The period from the end of the Project life and start of retirement activities through to the end of final reclamation of the Project.

As described in Section 5.3.2 (Temporal Boundaries), the Project will be operated for an indefinite period and the timing of retirement, or decommissioning, is not known at this time as it is anticipated that upgrades to reinforce or rebuild portions of the Project may occur over its lifetime to maintain its longevity. Further, potential effects and mitigation measures to be identified during the EA for the construction of the Project will likely equally apply to the potential removal of the Project at a future point in time, should it ever be required. Therefore, the construction scenario assessed as part of the EA is considered bounding and potential effects and mitigation measures for retirement are not identified separately in this EA.

The assessment of Project effects on non-Indigenous land and resource use considers effects that occur during the construction and operation and maintenance stages. These periods are sufficient to capture the maximum extent of the effects of the Project on non-Indigenous land and resource use.

7.1.4.2 Spatial Boundaries

The spatial boundaries for the non-Indigenous land and resource use assessment are defined by criterion-specific (and in some cases, sub-criterion-specific) local study areas (LSAs) and regional study areas (RSAs). The criterion-specific LSAs were established to encompass the areas which the Project is predicted to interact, and potentially have direct and/or indirect effects on. The following factors were used to determine criterion-specific LSAs for each non-Indigenous land and resource use criterion:

- Nature and characteristics of the land and resource use criterion;
- Expected potential effects and the spatial extent of potential Project effects; and
- Provincial, regional, and local government administrative boundaries.

Criterion-specific RSAs were established to provide a larger or regional context for the assessment of Project effects on a criterion. Each criterion-specific RSA encompasses the area



within which the net effects of the Project on a criterion could overlap with the net effects of other existing or reasonably foreseeable projects and activities on the same criterion.

The spatial boundaries for non-Indigenous land and resource use are summarized in Table 7.1-3 and Figure 7.1-1 below.











Spatial Boundaries	Area (ha)	Description	Rationale
Project Footprint	5,124.5 ha	 The Project footprint includes: Typical 46 m wide transmission ROW; Widened ROW for the separation of circuits F25A and D26A for 1 km; Modification of the Lakehead Transformer Station (TS), Mackenzie TS, and Dryden TS; Access roads (existing roads and new); Temporary supportive infrastructure associated with construction including fly yards, construction/stringing pads, laydown areas, construction camps, and helicopter pads; and Aggregate pits. 	 Designed to capture the potential direct effects of the physical footprint of the Project.
Local Study Area	460,871.1 ha	 Includes the Project footprint and a 4 km buffer from the Project footprint. 	 Established to encompass the areas with which the Project is predicted to interact, and potentially have direct and/or indirect effects on. This area sufficiently captures the local context for the criterion.
Regional Study Area	806,521.0 ha	 Includes the Project footprint and an 8 km buffer from the Project footprint. 	 Established to provide a larger or regional context for the assessment of Project effects. Encompasses the area within which the net effects of the Project could overlap with the net effects of other existing or reasonably foreseeable projects and activities on the same criterion.

Table 7.1-3: Spatial Boundaries

EA = environmental assessment; ha = hectares; km = kilometre; LSA = Local Study Area; m = metre; ROW = Right-of-Way; RSA = Regional Study Area





STUDTAREA	•		
PROJECT NO.	CONTROL	REV.	FIGURE
20137728	0030	1	7.1.1-2

CS



- RESOURCE / RECREATION
- WATERCOURSE
- EXISTING ACCESS ROAD NO IMPROVEMENTS REQUIRED
- EXISTING ACCESS ROAD POTENTIAL IMPROVEMENTS
- NEW ACCESS ROAD PREFERRED NEW ACCESS ROAD - ALTERNATE
- PREFERRED ROUTE TRANSMISSION LINE RIGHT-OF-WAY

- LOCAL STUDY AREA
- REGIONAL STUDY AREA
- TREATY BOUNDARY
- FIRST NATIONS RESERVE
- WATERBODY
- CONSERVATION RESERVE
- PROVINCIAL PARK

HYDRO ONE NETWORKS INC.

CONSULTANT	YYYY-MM-DD	2023-10-30
	DESIGNED	NA
NSD	PREPARED	DB
	REVIEWED	НК
	APPROVED	CS

TITLE PROJECT FOOTPRINT, LOCAL STUDY AREA, AND REGIONAL - STUDY AREA

PROJECT NO.	CONTROL	REV.	FIGURE
20137728	0030	1	7.1.1-3



- EXISTING ACCESS ROAD NO IMPROVEMENTS REQUIRED EXISTING ACCESS ROAD - POTENTIAL IMPROVEMENTS
- NEW ACCESS ROAD PREFERRED

- WATERBODY
- CONSERVATION RESERVE
- PROVINCIAL PARK

DESIGNED

PREPARED

REVIEWED

APPROVED

NSD

NA

DB

ΗК

CS

TITLE PROJECT FOOTPRINT, LOCAL STUDY AREA, AND REGIONAL STUDY AREA

00107700 0000 1	
20137728 0030 1	7.1.1-4



7.1.5 Description of the Existing Environment

This section describes the methods used in the collection of data to represent existing non-Indigenous land and resource use (i.e., baseline characterization).

7.1.6 Baseline Data Collection Methods

The baseline characterization for the non-Indigenous land and resource use assessment describes existing conditions as they relate to provincial parks, conservation reserves, ANSIs, enhanced management areas, land use planning, mining resource use, aggregate resources, hunting, trapping, and finishing, recreation and commercial tourism, and navigation in the study areas defined in Table 7.1-3 prior to Project construction.

The baseline characterization was developed through a desktop review of existing information.

7.1.7 Baseline Conditions

The regulatory context and regional overview are presented in the following sections for each land and resource use criterion, followed by a description of baseline conditions of the land use features and activities related to the criterion in the non-Indigenous land and resource use LSAs and RSAs.

7.1.7.1 Provincial Parks, Conservation Reserves, Areas of Natural and Scientific Interest, and Enhanced Management Areas

This section provides a summary of the existing environment for provincial parks, conservation reserves, ANSIs, and enhanced management areas within the RSA. This section also provides details regarding policy objectives and management plans for provincial parks and protected areas crossed by the Project footprint. Details regarding policy objectives and management plans for parks and protected areas are provided in order to assess the ability of the Project to conform with policy direction and maintain the management objectives of the protected areas crossed by the Project footprint.

7.1.7.1.1 Regulatory Context and Overview

Canada National Parks Act

The *Canada National Parks Act* was enacted in 2000 to regulate the protection of natural areas of national significance by outlining provisions for the care, maintenance, and restoration of national parks in Canada (Parks Canada 2022). Section 16 of the *Canada National Parks Act* gives the Governor in Council the authority to make regulations related to "(h) the restriction or prohibition of activities and the control of the use of park resources and facilities; and i) the establishment, operation, maintenance and administration of... Electricity... and respecting the use of those works and services" (*Canada National Parks Act* 2000).





One federally recognized national park (Pukaskwa National Park) in northwestern Ontario is administered under the *Canada National Parks Act*. Pukaskwa National Park is located south of the Town of Marathon, Ontario, which is located outside of the RSA (Parks Canada 2022).

There are no national parks that transect the Project footprint, the LSA, or the RSA.

Provincial Parks and Conservation Reserves Act, 2006

As described in Section 7.1.7.1.2 (Protected Areas Within the Study Areas), there are eight provincial parks and six conservation reserves located partially or wholly within the RSA. Ontario's provincial parks and conservation reserves are conserved through the *Provincial Parks and Conservation Reserves Act, 2006,* which provides the legislative framework for the creation, removal, alteration (with respect to size and boundaries) and management of provincial parks. Protection of representative ecosystems and 'provincially significant' elements of Ontario's natural and cultural heritage, along with maintenance of biodiversity, and provision of compatible, ecologically sustainable recreation are key aspects of this framework, as outlined through the following park objectives (Sub-section 2[1]):

- To permanently protect representative ecosystems, biodiversity and 'provincially significant' elements of Ontario's natural and cultural heritage, and to manage these areas to make sure that ecological integrity is maintained;
- To provide opportunities for ecologically sustainable outdoor recreation opportunities and encourage associated economic benefits;
- To provide opportunities for residents of Ontario and visitors to increase their knowledge and appreciation of Ontario's natural and cultural heritage; and
- To facilitate scientific research and to provide points of reference to support monitoring of ecological change on the broader landscape. 2006, c. 12, s. 2 (1).

Under the *Provincial Parks and Conservation Reserves Act, 2006,* the objectives for conservation reserves are the same as for provincial parks with the exception that the third objective for provincial parks (to provide opportunities for increased knowledge and appreciation of Ontario's natural and cultural heritage) does not apply to conservation reserves.

Maintenance of ecological integrity (defined as a "condition in which abiotic and biotic components of ecosystems and the composition and abundance of native species and biological communities are characteristics of their natural regions, and rates of change and ecosystem processes are unimpeded") through, but not limited to:

- Healthy and viable populations of native species, including species at risk and maintenance of the habitat on which species depend; and
- Air and water quality consistent with the protection of biodiversity and recreational enjoyment;



- Preservation and conservation of cultural, heritage, and natural resources through the protection and maintenance of heritage and cultural sites, places, features, objects, and other cultural resources that are of aesthetic, historic, scientific, cultural, social, or spiritual importance or significance; and
- Provision of ecologically sustainable outdoor recreation opportunities and recreation and tourism economy through infrastructure, amenities, and use locations that support sustainable outdoor recreation and tourism use and activity.

Section 20(2) of the *Provincial Parks and Conservation Reserves Act, 2006* permits utility corridors in Ontario's Provincial Parks and Conservation reserves, stating that "subject to the policies of the Ministry and the approval of the Minister, with or without conditions, utility corridors, including but not limited to utility corridors for electrical transmission lines, are permitted in provincial parks and conservation reserves" (Provincial Parks and Conservation Reserves Act 2006). Section 21 of the Act states that in approving a utility corridor under Section 20, the Minister must be satisfied that "there are no reasonable alternatives; that the lowest cost is not the sole or overriding justification; and that environmental effects have been considered and all reasonable measures will be undertaken to minimize harmful environmental impact and to protect ecological integrity" (MECP 2022).

Table 7.1-4 provides a breakdown of provisions found within management planning documents for parks and protected areas related to utility infrastructure.

Ontario Parks: Planning and Management Policies (1992)

Ontario Parks: Planning and Management Policies (1992 Update) further aims to protect 'provincially significant' natural, cultural, and recreational environments, through objectives focused on protection, recreation, heritage appreciation and tourism. The Ontario Parks: Planning and Management Policies (1992) and the *Provincial Parks and Conservation Reserves Act, 2006* and associated regulations are predicated on the protection of natural, recreational, and cultural values, and supporting features (Ontario Parks 2009).

ANSIs

In addition to provincial parks and conservation reserves, the Province of Ontario protects lands deemed to be ANSIs or enhanced management areas. ANSIs represent 'provincially significant' geological (earth science) and biological (life science) features. These include distinctive rocks, fossils, landforms, landscapes, and communities of plants and animals, which have high values for conservation, education, natural heritage, protection, appreciation and/or scientific study (MECP 2022).

Enhanced Management Areas

An enhanced management area is a Crown land use designation that is used to provide more detailed land use policy in areas of special features or values, such as those which are considered ecologically significant. The provincial level policies for enhanced management areas define policies for special activities and provide a framework for the development of area-



specific land use policies through local planning (under the Crown Land Use Policy Atlas for Crown land, or the *Planning Act* and Provincial Policy Statement [PPS] for private land) (MNRF 2021d).

Resource and recreational activities can occur within enhanced management areas but are subject to conditions that retain the significant value of the land being protected. For example, policies must be consistent with legislation such as the *Mining Act*.

There are five categories of enhanced management areas including natural heritage, recreation, remote access, fish and wildlife, and great lakes coastal areas enhanced management areas. Remote access enhanced management areas are intended to maintain the remote character of selected areas and provide high-quality remote recreational experiences, such as hunting, fishing, canoeing, and camping, which may be associated with commercial tourism operations. Forestry, mineral exploration and development, aggregate extraction and generation of electricity may occur within this category of enhanced management area through appropriate planning and permitting (MNRF 2021d).

Table 7.1-4 provides a breakdown of provisions related to utility infrastructure in the parks and protected areas in the Project footprint.









Protected Area and Management Planning Documents	Area in the Project Footprint (ha)	Relevant Provisions Regarding Transmission Lines and Utility Corridors in the Project Footprint	Allowance of Utility Infrastructure
 Quetico Provincial Park Quetico Provincial Park Management Plan (2018) (MECP 2021j); and Crow Land Use Policy Atlas – Quetico Provincial Park (Wilderness Class) 	0.6 ha	 New transmission line corridor crossings will be minimized where possible and they will be managed to reduce their impact on ecological, recreational, and aesthetic values. New crossings will be assessed, and if deemed appropriate must meet criteria of Section 21 of the <i>Provincial Parks and Conservation Reserves Act, 2006.</i> In permitting development of a utility corridor, the following must be considered: There are no reasonable alternatives; The lowest cost is not the sole or overriding justification; and Environmental impacts have been considered and all reasonable measures will be undertaken to minimize harmful environmental impact. When a utility corridor is no longer required for the purpose for which it was approved or will not be used for a period of five years or more, the utility corridor will be closed and effective measures will be taken to prevent its use, and the rehabilitation and removal of infrastructure will be undertaken. 	 Yes, with appropriate planning and permitting.
 Turtle River-White Otter Lake Provincial Park Turtle River- White Otter Lake Provincial Park Plan (2012) (MECP 2021m). 	12.6 ha	 New transmission line corridor crossings will be minimized where possible and they will be managed to reduce their impact on recreational and aesthetic values. New crossings will be assessed, and if deemed appropriate must be considered through an amendment to the park management plan. Manual/mechanical tending instead of the use of herbicides will be encouraged in the existing corridor. Utility corridors are permitted. In permitting development of a utility corridor, the following must be considered: 	 Yes, with appropriate planning and permitting. Commercial electricity generation not permitted.

Table 7.1-4:	Provisions for Utility	Infrastructure in Parks	and Protected Areas in	the Project Footprint
--------------	------------------------	-------------------------	------------------------	-----------------------





Protected Area and Management Planning Documents	Area in the Project Footprint (ha)	Relevant Provisions Regarding Transmission Lines and Utility Corridors in the Project Footprint	Allowance of Utility Infrastructure
		 There are no reasonable alternatives; The lowest cost is not the sole or overriding justification; and Environmental impacts have been considered and all reasonable measures will be undertaken to minimize harmful environmental impact. 	
		 When a utility corridor is no longer required for the purpose for which it was approved or will not be used for a period of five years or more, the utility corridor will be closed and effective measures will be taken to prevent its use, and the rehabilitation and removal of infrastructure will be undertaken. 	
 Campus Lake Conservation Reserve Campus Lake Conservation Reserve Management Statement (2005) (MECP 2021a; MNRF 2021d). 	91.0 ha	 Utility corridors are permitted. In permitting development of a utility corridor, the following must be considered: There are no reasonable alternatives; The lowest cost is not the sole or overriding justification; and Environmental impacts have been considered and all reasonable measures will be undertaken to minimize harmful environmental impact. When a utility corridor is no longer required for the purpose for which it was approved or will not be used for a period of five years or more, the utility corridor will be closed and effective measures will be taken to prevent its use, and the rehabilitation and removal of infrastructure will be undertaken. 	 Yes, with appropriate planning and permitting. Infrastructure should try to remain limited to existing transmission corridor between Elsie Lake, Campus Lake and Mable Lake. Disturbance of the weir and remnant sluice at the outlet of Mable Lake is not permitted.



Protected Area and Management Planning Documents	Area in the Project Footprint (ha)	Relevant Provisions Regarding Transmission Lines and Utility Corridors in the Project Footprint	Allowance of Utility Infrastructure	
 Swamp River ANSI No management planning document available (MMAH 2020; Ontario Parks, 2000). 	0.6 ha	 On Crown land, ANSIs are considered in the context of resource management planning and Crown land use planning. On private land, the Provincial Policy Statement provides direction for the protection of provincially significant ANSIs under the <i>Planning Act</i> and applicable respective municipal official plans (if applicable). The Natural Heritage Reference Manual also provides additional details related to ANSIs in Ontario. The Swamp River ANSI is located within the unincorporated community of Shebandowan which is administered by a local services board. Information on allowance of utility infrastructure within or adjacent to lands where ANSIs are present was not available at the time of reporting from the local services board. Conformance with the <i>Planning Act</i> and the Provincial Policy Statement (2020) is recommended, where the Provincial Policy Statement (2020) states that site alternation shall not be permitted in areas of natural and scientific interest. 	 May be permitted; however, dependant on maximum protection of the ASNI and consultation with the local township council, local service board, and/or MNRF. 	
 White Otter Enhanced Management Area Crown Land Use Policy Atlas – Policy Report: E2313a: White Otter (MNRF 2006; MNRF 2021d). 	61.3 ha	 Management of this area is governed by the Resource Management Guideline for the White Otter Enhanced Management Area (2005) and the general policies contained in the Atikokan District Land Use Guidelines (1983). Commercial Crown land dispositions for new operations may be authorized if the proposed activities are compatible with the management intent of the enhanced management area. Construction of utility corridors for energy transmission and communication lines is generally discouraged. Consideration of utility infrastructure is largely dependent on the Project's benefit to improving public 	 Yes, with appropriate planning and permitting. 	



Protected Area and Management Planning Documents	Area in the Project Footprint (ha)	Relevant Provisions Regarding Transmission Lines and Utility Corridors in the Project Footprint	Allowance of Utility Infrastructure
		services and the Project's ability to retain the area's remote character through planning and establishing standards for the location and the use or abandonment of roads and trails.	
		 Roads for industrial and commercial use are permitted; however, their standards should be lower than those that would normally be applied to primary access roads, while still allowing permitted activities and considering the health and safety of users. New roads, or substantial upgrades to existing roads, must be planned through comprehensive long term access planning that considers the values of the area, particularly the remote character of the area. Some guidelines are: Roads should be constructed to the lowest possible standard possible; New roads/trails should be directed to existing corridors where possible; Road layout should consider potential impacts on aesthetics (i.e., the visual experience of the visitors to the area); Design and closure/rehabilitation; The feasibility of effectively restricting public use of new roads will be considered in determining the appropriateness and location of new resource access roads; and New roads will not be open for motorized travel by 	
		the public. Existing authorized access will continue.	

Source: City of Thunder Bay 2019; MECP 2021a; MECP 2021b; MECP 2021c; MECP 2021d; MECP 2021e; MECP 2021f; MECP 2021g; MECP 2021h; MECP 2021i; MECP 202

ANSI = Area of Natural and Scientific Interest; CLUPA = Crown Land Use Policy Atlas; MECP = Ministry of the Environment, Conservation and Parks; MNRF = Ministry of Natural Resources and Forestry; ha = hectares; n/a = not applicable.





7.1.7.1.2 Protected Areas Within the Study Areas

Provincial Parks

Eight provincial parks were identified in the RSA. Together they have a total combined area of 544,096.9 hectares (ha).

- Of the 544,096.9 ha, approximately 58,556 ha (10.8%) of the provincial park lands intersect the RSA.
- The eight provincial parks that intersect the RSA are Aaron Provincial Park, Butler Lake Provincial Park, Kashabowie Provincial Park, Lola Lake Provincial Park, Quetico Provincial Park, and Sandbar Lake Provincial Park, Silver Falls Provincial Park, and Turtle River-White Otter Lake Provincial Park.

Five provincial parks are intersected by the LSA.

- Of the 58,556.9 ha of provincial park lands within the RSA, approximately 24,972.2 ha (4.6%) are intersected by the LSA.
- The five provincial parks that are intersected by the LSA are Aaron Provincial Park, Kashabowie Provincial Park, Lola Lake Provincial Park, Quetico Provincial Park, and Turtle River-White Otter Provincial Park.

Two provincial parks are intersected by the Project footprint.

- Of the 58,556.9 ha of provincial park lands within the RSA, approximately 13.2 ha (<0.01%) are intersected by the Project footprint.
- The two provincial parks that are intersected by the Project footprint are Quetico Provincial Park (access road only) and Turtle River-White Otter Lake Provincial Park.

One provincial park is intersected by the ROW.

- Of the 58,556.9 ha of provincial park lands within the RSA, approximately 2.4 ha (<0.01%) are intersected by the ROW.
- The one provincial park intersected by the ROW is Turtle River-White Otter Lake Provincial Park.
- Of the 2.4 ha of Turtle River-White Otter Lake Provincial Park intersected by the ROW, approximately 2.3 ha is forested area.

Conservation Reserves

• Six conservation reserves were identified in the RSA. Together they have a combined area of 25,114.2 ha. Of the 25,114.2 ha, approximately 23,136.0 ha (92.1%) of the conservation reserves intersect the RSA. The six conservation reserves that are intersected by the RSA are Adair Lake Conservation Reserve, Airport Road



Conservation Reserve, Campus Lake Conservation Reserve, East Wabigoon Conservation Reserve, Melgund Lake Conservation Reserve and Pyatt Lake Conservation Reserve.

Six conservation reserves are intersected by the LSA.

- Of the 25,114.2 ha of conservation reserve land in the RSA, approximately 14,196.9 ha (56.5%) are intersected by the LSA.
- The six conservation reserves that are intersected by the LSA are Adair Lake Conservation Reserve, Airport Road Conservation Reserve, Campus Lake Conservation Reserve, East Wabigoon Conservation Reserve, Melgund Lake Conservation Reserve and Pyatt Lake Conservation Reserve.

One conservation reserve is intersected by the Project footprint.

- Of the 25,114.2 ha of conservation reserve land in the RSA, approximately 91.0 ha (0.4%) are intersected by the Project footprint.
- The one conservation reserve that is intersected by the Project footprint is Campus Lake Conservation Reserve.

One conservation reserve is intersected by the ROW.

- Of the 25,114.2 ha of conservation reserve lands within the RSA, approximately 56.0 ha (0.2%) are intersected by the ROW.
- The one conservation reserve intersected by the ROW is the Campus Lake Conservation Reserve
- Of the 56.0 ha of Campus Lake Conservation Reserve intersected by the ROW, approximately 52.2 ha is forested area.

ANSIs

Four ANSIs were identified in the RSA. Together they have a combined area of 313.6 ha.

- Of the 313.6 ha identified, approximately 177.0 ha (56.4%) are intersected by the RSA.
- The four ANSIs that are intersected by the RSA are the Mokomon ANSI, Swamp River ANSI, Thunder Bay Lookout ANSI, and Intola ANSI.

Two ANSIs intersect the LSA.

- Of the 177.0 ha of ANSIs in the RSA, approximately 4.7 ha (1.5%) are intersected by the LSA.
- The two ANSIs that are intersected by the LSA are Swamp River ANSI and Thunder Bay Lookout ANSI.



One ANSI intersects the Project footprint.

- Of the 177.0 ha of ANSIs in the RSA, approximately 0.6 ha (0.4%) are intersected the Project footprint.
- The one ANSI that is intersected by the Project footprint is Swamp River ANSI.

One ANSI is intersected by the ROW.

- Of the 177.0 ha of ANSI within the RSA, approximately 0.6 ha (0.4%) are intersected by the ROW.
- The one ANSI intersected by the ROW is the Swamp River ANSI.
- Approximately 0.6 ha of the Swamp River ANSI intersected by the ROW is forested area.

Enhanced Management Areas

One enhanced management area, the White Otter Enhanced Management Area, was identified in the RSA. It has an area of 5,433.7 ha. The enhanced management area intersects:

- 4,260.0 ha of the RSA (78.4% of the total 5,433.7 ha identified);
- 2,136.3 ha of the LSA (39.3% of the ha of enhanced management area in the RSA);
- 61.3 ha of the Project footprint (1.1% of the of enhanced management area in the RSA); and
- 23.5 ha of the ROW (0.4% of the enhanced management area in the RSA). Of the 23.5 ha of the enhanced management area intersected by the ROW, approximately 20.3 ha is forested area.

The total combined area of all of the parks and protected areas identified in relation to the Project is 574,958.4 ha. The Project intersects:

- 86,129.0 ha of the RSA (15.0% of the 574,958.4 ha identified);
- 41,310.1ha of the LSA (7.2 of the 574,958.4 ha identified);
- 165.5 ha of the Project footprint (<0.1% of the 574,958.4 ha identified); and
- 82.5 ha of the ROW (<0.1% of the 574,958.4 ha identified). Of the 82.6 ha of the ROW that intersects parks and protected areas, approximately 75.3 ha is forested.

Table 7.1-5 and Figure 7.1-2 present details related to the occurrence and proportion of provincial parks, conservation reserves, ANSIs, and enhanced management areas of key relevance within the Project footprint, LSA and RSA.



Name	Size of Protected Area (ha)	Area in the Project ROW (ha)	Percentage of total in the Project ROW (%)	Area in the Project Footprint (ha)	Percentage of total in the Project Footprint (%)	Area in the Local Study Area (ha)	Percentage of total in the Local Study Area (%)	Area in the Regional Study Area (ha)	Percentage of total in the Regional Study Area (%)
Aaron Provincial Park	116.1	0.0	0.0%	0.0	0.0%	116.1	100.0%	116.1	100.0%
Butler Lake Provincial Park	3,266.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	1,337.7	41.0%
Kashabowie Provincial Park	2,070.8	0.0	0.0%	0.0	0.0%	1,761.0	85.0%	2,070.8	100.0%
Lola Lake Provincial Park	6,148.3	0.0	0.0%	0.0	0.0%	579.3	9.4%	4,443.9	72.3%
Quetico Provincial Park	471,937.6	0.0	0.0%	0.6	<0.1%	9,687.8	2.1%	27,210.2	5.8%
Sandbar Lake Provincial Park	8,052.9	0.0	0.0%	0.0	0.0%	0.0	0.0%	563.5	7.0%
Silver Falls Provincial Park	3,216.8	0.0	0.0%	0.0	0.0%	0.0	0.0%	184.5	5.7%
Turtle River- White Otter Lake Provincial Park	49,288.5	2.4	<0.1%	12.6	<0.1%	12,828.0	26.0%	22,629.3	45.9%
Provincial Parks Total	544,096.9	2.4	<0.1%	13.2	<0.1%	24,972.2	4.6%	58,556.0	10.8%
Adair Lake Conservation Reserve	2,804.0	0.0	0.0%	0.0	0.0%	1,083.7	38.6%	2,804.0	100.0%
Airport Road Conservation Reserve	66.8	0.0	0.0%	0.0	0.0%	66.8	100.0%	66.8	100.0%
Campus Lake Conservation Reserve	19,440.8	56.0	0.3%	91.0	0.5%	11,616.0	59.8%	17,462.6	89.8%

 Table 7.1-5:
 Parks and Protected Areas in the Study Areas


Name	Size of Protected Area (ha)	Area in the Project ROW (ha)	Percentage of total in the Project ROW (%)	Area in the Project Footprint (ha)	Percentage of total in the Project Footprint (%)	Area in the Local Study Area (ha)	Percentage of total in the Local Study Area (%)	Area in the Regional Study Area (ha)	Percentage of total in the Regional Study Area (%)
East Wabigoon Conservation Reserve	1,307.5	0.0	0.0%	0.0	0.0%	422.3	32.3%	1,307.5	100.0%
Melgund Lake Conservation Reserve	1,094.1	0.0	0.0%	0.0	0.0%	607.1	55.5%	1,094.1	100.0%
Pyatt Lake Conservation Reserve	401.0	0.0	0.0%	0.0	0.0%	401.0	100.0%	401.0	100.0%
Conservation Reserves Total	25,114.2	56.0	0.2%	91.0	0.4%	14,196.9	56.5%	23,136.0	92.1%
Mokomon ANSI	140.5	0.0	0.0%	0.0	0.0%	0.0	0.0%	140.5	100.0%
Swamp River ANSI	140.5	0.6	0.4%	0.6	0.4%	3.9	2.8%	3.9	2.8%
Thunder Bay Lookout ANSI	0.8	0.0	0.0%	0.0	0.0%	0.8	100.0%	0.8	100.0%
Intola ANSI	31.8	0.0	0.0%	0.0	0.0%	0.0	0.00%	31.8	100.0%
ANSIs Total	313.6	0.6	0.2%	0.6	0.2%	4.7	1.5%	177.0	56.4%
White Otter Enhanced Management Area	5,433.7	23.5	0.4%	61.3	1.1%	2,136.3	39.3%	4,260.0	78.4%
Enhanced Management Area Total	5,433.7	23.5	0.4%	61.3	1.1%	2,136.3	39.3%	4,260.0	78.4%



Name	Size of Protected Area (ha)	Area in the Project ROW (ha)	Percentage of total in the Project ROW (%)	Area in the Project Footprint (ha)	Percentage of total in the Project Footprint (%)	Area in the Local Study Area (ha)	Percentage of total in the Local Study Area (%)	Area in the Regional Study Area (ha)	Percentage of total in the Regional Study Area (%)
Total Protected Area	574,958.4	82.5	<0.1%	165.5	<0.1%	41,310.1	7.2%	86,129.0	15.0%

Source: (MECP, 2021a; MECP 2021b; MECP 2021c; MECP 2021d; MECP 2021e; MECP 2021f; MECP 2021g; MECP 2021h; MECP 2021i; MECP 202

< = less than; % = Percent; ANSI = Area of Natural and Scientific Interest; ha = hectare







0	10	20	
1:300,000		KILOMETRES	

DNSULTANT		YYYY-MM-DD 2023-			
		DESIGNED	NA		
NSD		PREPARED	DB		
		REVIEWED	НК		
		APPROVED	CS		





CONSULTANT	YYYY-MM-DD	2023-10-30
	DESIGNED	NA
	PREPARED	DB
	REVIEWED	НК
•	APPROVED	CS





7.1.7.1.2.1 Aaron Provincial Park

Aaron Provincial Park was established in 1958 and is a recreation class park of 116.1 ha, located in Zealand Township, east of Dryden. The park is in ecodistrict 4S 4 and the Dryden-Fort Frances-Atikokan Administrative District of the MNRF. The park is on the south shore of Thunder Lake (MECP 2021a).

Aaron Provincial Park is wholly (100.0%) within the RSA and LSA; however, none of its 116.1 ha area is crossed by the Project footprint.

The following features that support natural, historical, cultural, and recreational values are located in Aaron Provincial Park.

Natural Features: Aaron Provincial Park is located near the southern margin of the boreal forest region, with this region containing mixed woods such as balsam fir (*Abies balsamea*), jack pine (*Pinus banksiana*), trembling aspen (*Populus tremuloides*), white birch (*Betula papyrifera*), and black spruce (*Picea mariana*). Additionally, the shoreline vegetation in the area includes white cedar (*Thuja occidentalis*) and black ash (*Fraxinus nigra*) (MECP 2021a). Moose (*Alces alces*), white-tailed deer (*Odocoileus virginianus*), black bear (*Ursus americanus*), gray wolf (*Canis lupus*), Canada lynx (*Lynx canadensis*), pine marten (*Martes martes*), red fox (*Vulpes vulpes*), snowshoe hare (*Lepus americanus*), river otter (*Lontra canadensis*), and beaver (*Castor canadensis*) are some of the wildlife present in the park (MECP 2021a). The birds of the park are typical of the boreal forest. The park is located within the Canadian Shield and is underlain directly by Precambrian bedrock, consisting of Keewatin sedimentary and volcanic rocks (MECP 2021a).

Cultural Features: Based on information provided by the NWOMC and Region 2 cultural features have been identified to include a historic occupation/camp/cabin, a contemporary gathering site and a historic canoe route. Additionally, the NWOMC and Region 2 has also noted there are snow machine trails, land portages, and contemporary canoe routes present.

Recreational Features: The Department of Northern Development established Aaron Provincial Park it as a roadside camping park in 1935 (MECP 2021a). Located in the Sunset Country Travel Area, the park is a destination for local residents from Dryden and a stopover for travellers on the TransCanada Highway (MECP 2021a). The park has sandy beaches and playgrounds, with Thunder Lake providing opportunities for swimming, boating, and fishing (MECP 2021a). Sites in the park include picnic tables, a picnic shelter, fireplace grills, water, vault privies and playground equipment, and a boat launch is located at the northernmost day use area (MECP 2021a).

Aaron Provincial Park has 98 campsites, 39 of which are provided with electrical hook ups (MECP 2021a). Campground amenities include vault privies, a comfort station with shower and laundry facilities, trailer service facilities, water outlets, garbage disposal, recycling depots and firewood sales (MECP 2021a). The park also offers a number of seasonal leases for sites (MECP 2021a).



The Aspen Trail and the Eastern White Cedar Trail are the two trails in the park (MECP 2021a).

7.1.7.1.2.2 Butler Lake Provincial Park

Butler Lake Provincial Park is located 10 kilometres (km) southeast of Dryden. The park was established in 1985 and is classified as a Nature Reserve Park, with the park having a total area of 3,266 ha. The park contains glacio-lacustrine features including an 8 m section of varved clay deposited by the post-glacial Lake Agassiz. Access is provided via Wabigoon Lake. There are no visitor facilities in Butler Lake Provincial Park (MECP 2021n).

A portion of Butler Lake Provincial Park is in the RSA (41.0% or 1,337.7 ha of the park's 3,266 ha area); however, none is within the LSA or crossed by the Project footprint.

The following features that support natural, historical, cultural, and recreational values are located in Butler Lake Provincial Park.

Natural Features: Gently rolling clay over bedrock topography is considered to be representative of the landscape unit in which Butler Lake Provincial Park is found, including the glacial Lake Agassiz basin deposits consisting of red carved clay. Vegetation species including poplar (*Populus sp.*), white birch, white spruce (*Picea glauca*), balsam fir, red pine (*Pinus resinosa*), jack pine, cedar and black spruce are found within the park. Fauna identified within the park includes red squirrel (*Sciurus vulgaris*), white-throated sparrow (*Zonotrichia albicollis*), red-breasted nuthatch (*Sitta canadensis*), boreal chickadee (*Poecile hudsonicus*), evening grosbeak (*Coccothraustes vespertinus*), bald eagle (*Haliaeetus leucocephalus*), and osprey (*Pandion haliaetus*) (MECP 2021n).

Cultural Features: Members of Wabigoon Lake Ojibway Nation are known to harvest wild rice from the creek draining from Butler Lake into Wabigoon Lake (MECP 2021n). Based on information provided by the NWOMC and Region 2, cultural features have been identified to include a historic occupation/camp/cabin, a contemporary gathering site and a historic canoe route. Additionally, there are motor boat routes, snow machine trails, land portages and contemporary canoe routes present.

Recreational Features: Butler Lake Provincial Park is a non-operating park, there are no visitor facilities located at this park, as access is provided via Wabigoon Lake (MECP 2021n). Availability of facilities and activities may be restricted to specific areas of the park, may be ecologically dependant, or may be seasonally weather dependant. Regulated recreational activities include hunting, fishing, and trapping. Portions of two traplines (DR020 and DR021) are within the park boundary. According to MECP, the traplines are registered to two non-Indigenous trappers and two non-Indigenous helpers. DR20 does not cross the Project footprint, while DR21 does (Table 7.1-31) (MECP 2021n).





7.1.7.1.2.3 Kashabowie Provincial Park

Kashabowie Provincial Park is located 90 km west of Thunder Bay and 5 km east of the unincorporated community of Kashabowie. The park was established in 1985 and classified as a Natural Environment Park having a total area of 2,070.8 ha. The park contains post-glacial features including an esker complex, outwash apron, and a glacial lake spillway (MECP 2021f).

Kashabowie Provincial Park is wholly within the RSA and 1,761.0 ha of its 2,070.8-ha area is within the LSA (85.0%); however, none of it is intersected by with the Project footprint.

The following features that support natural, historical, cultural, and recreational values are located in Kashabowie Provincial Park.

Natural Features: Kashabowie has a diversity of wetlands that include bogs, swamps, shoreline and fluvial marshes and the only site region representation of loess dep (MECP 2021f).

Cultural Features: A total of two archaeological sites have been identified and it has been noted that there is the potential for more sites (MECP 2021f).

Recreational Features: The Kashabowie Provincial Park is a non-operating park, there are no facilities located at this park. Activities permitted include boating, fishing, hunting, and canoeing (Ontario Parks 2022b). The Park comprises approximately 25% of the trapline area #112 and 20% of trapline area #130 and less than 5% of Bait Fish Licence area #T.B.-43. It has been noted that no other commercial activities take place within the land portion of the park area. However, water-based recreation activities that are from tourism establishments located outside of the park do take place (MECP 2021f).

7.1.7.1.2.4 Lola Lake Provincial Park

Lola Lake Provincial Park is in the MNRF District of Dryden-Fort Frances-Atikokan and MNRF's Northwestern Region. The park has a total area of 6,148.3 ha, with the site region 4S and site district 4S-3. The park is located about 20 km northeast of Dryden (MECP 2021g; Ontario Parks 2022c).

Lola Lake Provincial Park is intersected by the RSA (72.3% or 4,443.9 ha of the park's 6,148.3 ha area) and the LSA (9.4% or 579.3 ha of the park's 6,148.3 ha area); however, it is not intersected by the Project footprint.

The following features that support natural, historical, cultural, and recreational values are located in Lola Lake Provincial Park.

Natural Features: Lola Lake protects an extensive peatland that rests upon a sedimentary sand plain. The park also contains a portion of the Hartman Moraine, terraces and clays from two vanished, postglacial lakes, a moraine outwash, and bogs (MECP 2021g; Ontario Parks 2022c).





Cultural Features: Based on information provided by the NWOMC and Region 2, cultural features have been identified to include a historic occupation/camp/cabin, and a sacred/spiritual site (place of importance). Additionally, the NWOMC and Region 2 noted that a snow machine trail is present.

Recreational Features: There are no commercial tourist activities or visitor facilities within the park area. Regulated recreational activities include hunting, fishing, and trapping. The area is presently under licence to three bait fishermen and portions of two traplines fall within the park boundary, with one trapline cabin located within the park. Hunting for deer and moose occurs in and around the park in the fall and fishing for both warm and cold-water species is present. No boat cache decals of any kind have been issued (MECP 2021g; Ontario Parks 2022c).

7.1.7.1.2.5 Quetico Provincial Park

Quetico Provincial Park is located in the District of Rainy River and the Dryden-Fort Frances-Atikokan Administrative District of the MNRF, approximately 160 km west of Thunder Bay and adjacent to the Canada-United States border (MECP, 2021j) The park has a total area of 471,937.6 ha. In 1996, the Canadian side of the waterway along the international border was designated by the Canadian federal and Ontario provincial governments as part of the Boundary Waters-Voyageur Waterway, a Canadian Heritage River (MECP 2021j).

Quetico Provincial Park intersects 27,210.2 ha of the RSA (5.8% of the park's 471,937.6 ha area), 9,687.8 ha of the LSA (2.1% of the park's 471,937.6 ha area), and 0.6 ha of the Project footprint (<0.01% of the park's 471,937.6 ha area) along an existing access road where no access road improvements are required.

The following features that support natural, historical, cultural, and recreational values are located in Quetico Provincial Park.

Natural Features: Quetico Provincial Park lies on the southwestern portion of a vast area of ancient rock known as the Canadian Precambrian Shield (the Shield). The Shield forms the foundation of the North American continent and consists of some of the oldest rocks on earth (MECP 2021j). Quetico Provincial Park is situated in ecodistrict 4W-1, within the Great Lakes-St. Lawrence Forest Region, and borders the Boreal forests to the north and the Great Plains forests to the west and southwest (MECP 2021j).

A number of plant species have been identified in the park and these species include red and white pine, eastern white cedar communities, hardwood forest communities, and mixedwood forest communities (MECP 2021j). The park also contains open wetland communities, a number of bog communities, including some that contain a locally rare orchid species (MECP 2021j). Wawiag and Cache River floodplains are extremely rare in Quetico and northwestern Ontario, with the Wawiag River floodplain having both southern and western species present (locally rare herbaceous species and provincially rare species located in Kawa Bay) (MECP 2021j).



- Vegetation in the area includes red ash (*Fraxinus pennsylvanica*), silver maple (*Acer saccharinum*) stands with bur oak (*Quercus macrocarpa*), poison ivy (*Toxicodendron radicans*), royal fern (*Osmunda regalis*), small sundrops (Oenothera *perennis*) and sand cherry (*Prunus pumila*) (MECP 2021j). There is also a silver maple community with trembling aspen, a white elm community with a large component of basswood (*Tilia americana*), bur oak and red maple (MECP 2021j). Associated with this community are many southern herbaceous plants (MECP 2021j).
- Provincially rare basic cliff communities are found along the Man Lakes Chain, Emerald and Ottertrack lakes and on a tributary of the Wawiag River (MECP 2021j).
- Various mammal species have been recorded to date in the park, representing 61% of Ontario's mammal list (excluding non-native and marine mammals) (MECP 2021j). As the park is of a relatively large size, the area is able to support populations of species that require a relatively large home range and/or large portions of contiguous habitat (MECP 2021j). Such species found in Quetico include black bear, pine marten, moose, gray wolf, Canada lynx, coyote (*Canis latrans*), white-tailed deer, shrews (*Soricidae sp.*), moles (*Talpidae sp.*), bats (*Chiropter sp.*), squirrels (*Sciuridae sp.*), voles (*Microtus sp.*), mice (*Peromyscus sp.*), and weasels (*Mustela sp.*) (MECP 2021j).
- Quetico's transitional geographical character results in an overlapping of typically northern, southern, eastern and western species of birds occurs (MECP, 2021j). The common raven (*Corvus corax*), gray jay (*Perisoreus canadensis*), black-backed woodpecker (*Picoides arcticus*), black-capped chickadee (*Poecile atricapillus*), great gray owl (*Strix nebulosa*), spruce grouse (*Falcipennis canadensis*) and many species of wood warblers (*Phylloscopus sibilatrix*), the Nashville warbler (*Leiothlypis ruficapilla*), magnolia warbler (*Setophaga magnolia*), and mourning warbler (*Geothlypis philadelphia*) are among the most common species noted in the park (MECP 2021j). Pine grosbeak (*Pinicola enucleator*), evening grosbeak, common redpoll (*Acanthis flammea*), white-winged crossbill (*Loxia leucoptera*), red crossbill (*Loxia curvirostra*), pine siskin (*Spinus pinus*) and purple finch (*Haemorhous purpureus*) are some of the bird species found in Quetico Provincial Park in the winter months (MECP 2021j).
- Birds at the northern limit of their range include the black-billed cuckoo (*Coccyzus erythropthalmus*) and indigo bunting (*Passerina cyanea*), while birds common to the western prairies, such as the yellow-headed blackbird (*Xanthocephalus xanthocephalus*) and western meadowlark (*Sturnella neglecta*), have been observed. Additionally, populations of bald eagle and osprey have been identified in the park, as well as three accipiter species in Ontario are noted, including Cooper's hawk (*Accipiter cooperii*), northern goshawk (*Accipiter gentilis*), and sharp-shinned hawk (*Accipiter striatus*) (MECP 2021j).
- There are various species of frog present; one species of toad and two species of salamander, snake and turtle have been recorded within the park (MECP 2021j).



- A total of 48 fish species have been previously identified in Quetico, including both communities of coldwater and warmwater species (MECP 2021j). Forty-nine species of moths and 31 species of butterflies have been identified to date in Quetico, including the monarch butterfly, which has been designated a species at risk (MECP 2021j).
- Dragonflies and damselflies are some of the more visible invertebrates in the park, with the pygmy snaketail (*Ophiogomphus howei*) being a globally rare clubtail dragonfly ranked as a species of Special Concern. This dragonfly is known at only one location in Ontario at Lady Rapids on the Namakan River close to the western boundary of Quetico, where a single exuvium was discovered in June 2007.

Cultural Features: Cultural heritage values identified include pictographs, archaeological encampment sites, burial sites, abandoned logging camps and old ranger cabins (MECP 2021j). Additionally, NWOMC and Region 2 identified cultural features that include a sacred/spiritual site (place of importance), a historic occupation/camp/cabin, a historic trading route, important landscape features, contemporary gathering sites, and historic trails. NWOMC and Region 2 also indicated that there are canoe routes and snow machine trails present in the Park.

Recreational Features: Interior campsites in Quetico have minimal land disturbance (MECP 2021j). There are more than 2,000 interior campsites within the park, and all are unmarked, have no privies or fire grates, and are available on a first-come first-serve basis (MECP 2021j).

- The Dawson Trail Campground was established in 1957 and the facilities are provided in the Chippewa and Ojibwa campgrounds for day-use, car-camping and interior access (MECP 2021j). Campground amenities include: 106 campsites, 49 of which have electricity and two of which are barrier-free, as well as three rustic cabins, comfort stations and day-use areas (MECP 2021j). Additional campground amenities include vault privies, potable water, trailer service facilities and a comfort station with shower and laundry facilities (MECP 2021j). Interior access facilities include a parking area and a canoe-launching site near the Ojibwa campground (MECP 2021j).
- The park also has a network of day-hiking and interpretive trails, including interpretive trails (1.2 to 2.2 km in length) that are used by car-campers and day-users (MECP 2021j). A 1 km barrier-free boardwalk runs alongside the Pickerel River from the Heritage and Information Pavilion to the playground beach. Additionally, a 4.4 km hiking trail runs south and west from the Ojibwa campground to the Pines Beach on Pickerel Lake, and a 4.2 km hiking trail runs parallel to the French River on the former Camp 111 road (MECP 2021j).
- A Nordic ski trail system on Dawson Trail Campground roads, hiking trails, and new ski trails has been developed, which include approximately 30 km of groomed ski trails within the French Lake access zone and environs, and a 24 km loop to Sawmill Lake (MECP 2021j).



 Regulated recreational activities include hunting, fishing, and trapping. Recreational fishing is permitted in the park subject to the Ontario Fishing Regulations.
 FMZ 5 regulation exceptions require the use of artificial lures and barbless hooks by park visitors in Quetico Provincial Park (MECP 2021j).

7.1.7.1.2.6 Sandbar Lake Provincial Park

Sandbar Lake Provincial Park is located in the District of Kenora and the Dryden-Fort Frances-Atikokan Administrative District of the MNRF, approximately 100 km east of the City of Dryden and 12 km northeast of the Town of Ignace on Highway 599. Sandbar Lake Provincial Park was first created as a recreation class park of 3,157 ha in 1970. Through a variety of additions and deregulations, and a change in class, the park is now managed as a natural environment park of 8,052.9 ha (MECP 2021o).

Sandbar Lake Provincial Park intersects 563.5 ha of the RSA (7.0% of the park's 8,052.9 ha area). None of the park's land overlaps the LSA or the Project footprint.

The Ontario Living Legacy (OLL) addition to the park was regulated under *Ontario Regulation 210/03*, as the 28 ha former Sandbar Lake Forest Reserve (F2295) is located adjacent to the southwest boundary of the OLL addition (MECP 2021o).

The park contains a one-hectare (1 ha) aggregate permit and since the aggregate permit has been retired through normal processes, a Crown Land Use Policy Atlas amendment has been processed to redesignate the area as recommended provincial park. This amendment was in May 2010 (MECP 2021o).

The following features that support natural, historical, cultural, and recreational values are located in Sandbar Lake Provincial Park.

Natural Features: Sandbar Lake Provincial Park is located on the eastern boundary of Ecodistrict 4S-5 (Manitou), along the western boundary of 3W-2 (Savanne) and near the southern margin of the Boreal Forest Region (MECP 2021o).

- Forests within this park are dominated mainly by conifer and conifer-mixedwood stands, and also contain hardwood and marsh/fen communities. Relatively uncommon types of forests are also present in the park, such as red pine (MECP 2021o).
- The OLL serves as an upland and wetland corridor between Paguchi Lake and Sandbar Lake Provincial Park, in addition to containing wetland complexes, including a fen with ridges and swales supporting grasses, sedges and bulrushes, a poor fen within a raised bog, a wet meadow supporting grasses and sedges within a floodplain, and a swamp (MECP 2021o). This swamp is a headwater wetland of Sandbar Lake Provincial Park and has been identified to be one of the largest forested wetlands in the area (MECP 2021o).



- The soil drainage in this area is comprised of glacial clay, sand and gravel deposits (MECP 2021o). Over time, diverse wetland types have developed within both the original park and the OLL addition (MECP 2021o).
- Sandbar Lake Provincial Park is representative of the Boreal Forest Region, with identified mammals in the park including moose, black bear, timber wolf, lynx, pine marten, red squirrel, snowshoe hare, river otter, and beaver (MECP 2021o). Reptile species include the leopard frog, boreal chorus frog, spring peeper, and American toad, in addition to the eastern garter snake and the western painted turtle (MECP 2021o).
- Additionally, more than 65 bird species have been identified, the species are typical of the boreal forest and include a wide variety of songbirds, raptors, shorebirds, and waterfowl. A bald eagle's nest has been previously identified near Sandbar Lake Provincial Park.
- The wetlands provide excellent habitat for amphibians and reptiles. Species previously identified include the leopard frog, boreal chorus frog, spring peeper, and American toad. The eastern garter snake and the western painted turtle have also been found in the park.
- Sandbar Lake Provincial Park is located within the Canadian Precambrian Shield (MECP 2021o). It is noted that a significant landform complex and earth science feature within the OLL addition are the multiple ridges of the Lac Seul Moraine, with three being identified as prominent and considered to be regionally significant (MECP 2021o).
- The baymouth bar and enclosed wetland feature on Paguchi Lake is considered to be locally significant (MECP 2021o).

Cultural Features: Several prehistoric sites have been identified within the original Sandbar Lake Provincial Park, with the known sites zoned as historical due to the locations having evidence of prehistoric human occupation (MECP 2021o). This includes artefacts that indicate occupation during the Laurel and Blackduck Period (MECP 2021o).

Recreational Features: Sandbar Lake Provincial Park offers a variety of recreational opportunities.

- An Ontario Parks survey indicated that most campers engaged in resting/relaxing, followed by swimming/wading, trail hiking, fishing, use playground equipment, nature viewing, motorboating, picnicking, biking, and canoeing (Ontario Parks 2008).
- Interior camping opportunities are available in the OLL addition to Sandbar Lake Provincial Park, on the shore of Paguchi Lake (MECP 2021o).
- Paguchi Lake is popular with recreational boaters, as high-quality sport fishing for lake trout occurs on this lake, which can be reached by two formal access points (off of Road 325), as well as from informal boat launches (MECP 2021o).



- Hunting for large game and game birds occurs in the fall using old forest access roads (MECP 2021o). There are no formal motorized snow vehicle trails but there is motorized snow vehicle use for ice fishing on Paguchi Lake (MECP 2021o).
- The majority of day-users to Sandbar Lake Provincial Park are local residents, with some users being tourists that visit the park as one of several destinations or as a stopover. Winter day-use on Sandbar Lake Provincial Park is minimal, with some motorized snow vehicle use associated with ice fishing, as well as cross-country skiing (MECP 2021o).

7.1.7.1.2.7 Silver Falls Provincial Park

Silver Falls Provincial Park is located in the District of Thunder Bay and the Thunder Bay-Ignace District, approximately 60 km northwest of Thunder Bay. The park has a total area of 3,216.8 ha.

Silver Falls Provincial Park intersects 184.5 ha of the RSA (5.7% of the park's 3,216.8 ha area), None of the park's land overlaps the LSA or the Project footprint.

All land within Silver Falls Park is Crown Land, with a 338 ha Water Power Lease agreement #64 with Ontario Hydro and a Land Use Permit with Ontario Hydro for a transmission line from the generation station to the park's south boundary identified (MECP 2021p).

The following features that support natural, historical, cultural, and recreational values are located in Silver Falls Provincial Park.

Natural Features: Silver Falls Provincial Par is located within the Thunder Bay MNR District, in the North Central Region (MECP 2021p).

- Bare bedrock, steep slopes and organic pools have been identified in the park, in addition to the associated vegetation communities (MECP 2021p). As well, uncommon plants have been noted to frequent low Kaministiquia Valley (MECP 2021p).
- No major resource management issues have been identified with resource features at the park (MECP 2021p). Tree plantations have been identified to be located within the park (MECP 2021p).
- There are Algonquin Stadial Timiskaming Interstadial geological themes identified in the area, with the features including Late Wisconsin, Dog Lake Moraine, a wave-modified moraine, glacial Lake Kaministiquia spillway, lake clays, and shore processes (MECP 2021p).Earth and life science inventories have been completed and are on file in the Thunder Bay District Office (MECP 2021p).

Cultural Features: Several significant archaeological sites have been identified in the Silver Falls Park area, with detailed maps at the Thunder Bay District Office which illustrate the locations of the archaeological sites (MECP 2021p).



Recreational Features:

- In 1983, it was noted that the use of Silver Falls was estimated to be 6,500 camper nights and 1,500 day-user days (MECP 2021p).
- Sport fishing for Northern Pike occurs to a limited degree on Kaministiquia River, with ice fishing occurring in the immediate area of the Dog Lake campground (MECP, 2021p). Local residents hunt for deer, moose and grouse in the Park, mainly during October and November (MECP 2021p).
- Wildlife viewing in Silver Falls is permitted (MECP 2021p).
- Trapline area #172 is located within the park boundary, as well as a trapline cabin, in the northwest section of the park (MECP 2021p). Additionally, the Bait Fish Licence area #T.B.-109 is in the park (MECP 2021p).
- Trapping will be phased out in the Park over a 21-year period or when the trapper retires or dies, whichever is sooner (MECP 2021p). At that time, those portions of the licence within the park will be removed (MECP 2021p). Where a trapper's licence lapses, the licence will not be renewed and no new licences are expected to be issued for Silver Falls Provincial Park (MECP 2021p). The existing cabin has been identified as being allowed to stay in its present location; however, no additional cabins or relocation of the existing cabin is permitted (MECP 2021p).
- Aggregate extraction will not be permitted except by the MNRF for park purposes (MECP 2021p).
- Bait fishing or other commercial activities will not be permitted within the park, as well the park has been withdrawn from staking (MECP 2021p).

7.1.7.1.2.8 Turtle River-White Otter Lake Provincial Park

In 2003, the Turtle River-White Otter Lake Provincial Park boundary was amended to include additions recommended through Keep It Wild and Ontario's Living Legacy and it now totals 49,288.5 ha and is a non-operating park (MECP 2021m). Turtle River-White Otter Lake Provincial Park makes a major contribution to the provincial parks system. The Turtle River waterway has long been recognized as a significant canoe route and natural area with unique biophysical, recreational, and cultural attributes (MECP 2021m).

Turtle River-White Otter Provincial Park intersects 22,629.3 ha of the RSA (45.9% of the park's 49,288.5 ha area), 12,828.0 ha of the LSA (26.0% of the park's 49,288.5 ha area), and 12.6 ha of the Project footprint (<0.1% of the park's 49,288.5 ha area).

The following features that support natural, historical, cultural, and recreational values are located in Turtle River-White Otter Lake Provincial Park.



Natural Features: Turtle River-White Otter Lake Provincial Park contains a number of lakes. with 22 sets of rapids and approximately 30 portages along the route (MECP 2021m). The two largest lakes in the park are White Otter and Eltrut, followed by McNamara, Dibble, Smirch, and Jones (MECP 2021m). The park contains a cross-section of granitic and gneissic rocks of the central portion of the Wabigoon Subprovince, including the White Otter batholith, a major Late Archean granitic intrusion (MECP 2021m). There is also the presence of rarely seen red clays interbedded with grey clays, which represent the expansion and contraction of glacial Lake Agassiz in conjunction with the constantly changing ice front (MECP 2021m). The park is situated in a bedrock-controlled landscape typical of the Precambrian Shield, while the park's vegetation is representative of the transitional zone between the Great Lakes-St. Lawrence and Boreal forest regions (MECP 2021m). The park contains various vegetation, including birch, oak, green ash (Fraxinus pennsylvanica), and silver maple on alluvial sites at the southern end of the park and boreal forest species such as white spruce, black spruce, balsam fir, jack pine, trembling aspen, and white birch are found interspersed with red pine and white pine (*Pinus*) strobus) and other species more typical of the Great Lakes-St. Lawrence forest (MECP 2021m). The southern reaches of the waterway have large marshes and areas of wild rice, which provide abundant habitat for moose and waterfowl (MECP 2021m). The faunal species found in the park are typical of the boreal forest, although a few species representative of the Great Lakes-St. Lawrence forest have been noted (MECP 2021m). Mammals identified include moose, whitetailed deer, black bear, wolf, river otter, muskrat (Ondatra zibethicus), beaver, mink (Neovison vison), pine marten, fisher (*Pekania pennanti*), fox (*Vulpes sp.*), Canada lynx, eastern chipmunk (Tamias striatus), and red squirrel. Additionally, bird species observed were least flycatcher (Empidonax minimus), red-eved vireo (Vireo olivaceus), winter wren (Troglodytes hiemalis), white-throated sparrow, yellow-rumped warbler (Setophaga coronata), and Swainson's thrush (Catharus ustulatus) (MECP 2021m). It has also been noted that there are provincially rare footnote species such as the bald eagle, caspian tern (Hydroprogne caspia), winter bentgrass (Agrostis hyemalis), fir-clubmoss (Huperzia selago), water dock (Rumex hydrolapathum), and dwarf birch (Betula nana) in the park (MECP 2021m).

Cultural Features: The park has documented 39 archaeological sites, 37 pictograph sites and numerous logging remnants dating back to the early 20th century have been documented (MECP 2021m). Located on White Otter Lake is a three-storey castle structure (White Otter Castle) that was built in 1914 (MECP 2021m). The castle is constructed of red pine logs, some of which are 30 to 40 m in length and 50 cm in diameter, weighing up to one ton each (MECP 2021m). NWOMC and Region 2 have identified cultural features that include a historic event site, historic trails, a sacred/spiritual site, historic sites, and contemporary gathering. Canoe routes and snow machine trails are also present and have been identified.

Recreational Features: Regulated recreational activities include hunting, fishing, and trapping. There are seven commercial outpost camps and seven trap cabins in the park, in addition to outposts near the park boundary on Pekagoning Lake (MECP 2021m). There are no lodges on patent land within the park and there are numerous established and potential backcountry campsites that have been documented in the park (MECP 2021m). No commercial fishing



activity has been licensed since January 1, 1992 and no new operations are permitted (MECP 2021m). Nineteen traplines are overlapping the park boundary and managed by the Dryden-Fort Frances-Atikokan MNRF District (MECP 2021m). Trapping by Indigenous trappers can continue indefinitely. Trapping by non-Indigenous trappers is permitted to continue, except in the park's nature reserve, as it was noted that no new Bear Management Area (BMA) licences will be issued in the park (MECP 2021m). Tourism opportunities in the park exist for hunting, fishing, canoe trip outfitting and tours to White Otter Castle (MECP 2021m). There are tourist outfitters that offer tours of White Otter Castle and access the area by motorboat, motorized snow vehicle, floatplane, or canoe (MECP 2021m).

7.1.7.1.2.9 Adair Lake Conservation Reserve

Adair Lake Conservation Reserve is a 2,804 ha conservation reserve located approximately 50 km southeast of the City of Dryden (MECP 2021b). The Adair Lake Conservation Reserve is located within the MNRF Dryden and Wabigoon Administrative Area, which is found within the greater MNRF administrative district of Dryden-Fort Frances-Atikokan (Northwest Region) (MECP 2021b).

Adair Lake Conservation Reserve intersects 2,804.0 ha of the RSA (100% of the reserve's 2,804 ha area) and 1,083.7 ha of the LSA (38.6% of the park's 2,804 ha area); however, it does not intersect with the Project footprint.

The following features that support natural, historical, cultural, and recreational values are located in Adair Lake Conservation Reserve.

Natural Features: Vegetation in the area includes upland forest and forest dunes, with jack pine and black spruce (MECP 2021b). Wetlands are also present in the conservation, such as string fen, treed fen, open bog, and treed bog (MECP 2021b). Lastly, bird species include sharpshinned hawk, black back woodpecker (*Picoides arcticus*), gray jays, common raven, warblers, savannah sparrow (*Passerculus sandwichensis*), red squirrel (MECP 2021b). Geologically, bedrock underlain with volcanic rock is present, along with pillow structures, peat and glacial to glaciofluvial, glaciofluvial outwash and shallow water glaciolacustrine sands, gravels and boulders (peatland is considered regionally significant due to its considerable size in northwestern Ontario) (MECP 2021b).

Cultural Features: Based on information provided by the NWOMC and Region 2, cultural features have been identified that include a historic occupation/camp/cabin, as well as the presence of snow machine trails.

Recreational Features: Regulated recreational activities include hunting, fishing, and trapping. The other permitted activities in the conserve have been noted to be non-regulated (i.e., exploring, nature study) (MECP 2021b). Mechanical travel within the conservation reserve, including the use of snowmobiles and all-terrain vehicles (ATVs), is permitted only on existing roads and trails, as off-trail mechanized travel is only permitted for retrieval of game (MECP 2021b). No trails have been noted in the conservation reserve (MECP 2021b). As it was advised



that activities producing compaction of the peat within the conservation reserve be disallowed, there is no trail development expected to be considered within this conservation reserve (MECP 2021b).

7.1.7.1.2.10 Airport Road Conservation Reserve

Airport Road Conservation Reserve is a 66.8 ha reserve located 7 km northeast of the City of Dryden (MECP 2021c). The conservation reserve is located in the MNRF District of Dryden-Fort Frances-Atikokan and the MNRF's Northwestern Region (MECP 2021c). Airport Road Conservation Reserve falls within the area of Treaty 3 (MECP 2021c) (Ontario Parks 2022a).

Airport Road Conservation Reserve intersects 66.8 ha of the RSA and LSA (100% of the 66.8 ha area); however, none of it intersects with the Project footprint.

The following features that support natural, historical, cultural, and recreational values are located in Airport Road Conservation Reserve.

Natural Features: This site contains representative landforms and vegetation types, including both basin and flat bogs, thicket swamp, conifer swamp and an ice contact delta, which forms part of the Hartman Moraine (MECP 2021c). Northern bog sedge (*Carex gynorcrates*), a boreal-subarctic sledge that occurs sporadically throughout northwestern Ontario, is found within this site (MECP 2021c).

Cultural Features: Airport Road Conservation Reserve has no documented cultural heritage features to date (MECP 2021c). Based on information provided by the NWOMC and Region 2, cultural features have been identified that include a historic occupation/camp/cabin, and a sacred/spiritual site. Additionally, NWOMC and Region 2 identified the presence of snow machine trails and a canoe route.

Recreational Features: Opportunities exist for wildlife viewing, hiking, cross-country skiing, snowshoeing, and hunting (MECP 2021c).

7.1.7.1.2.11 Campus Lake Conservation Reserve

Campus Lake Conservation Reserve is located in northwestern Ontario in the Dryden-Fort Frances-Atikokan District, approximately 12 km south of the Township of Ignace and 33 km north of the Town of Atikokan (MECP 2021d). The conservation reserve is approximately 19,440.8 ha in size, encompassing Campus, Elsie, Mable and Sandford Lakes, and portions of the Turtle River and the associated waters (MECP 2021d). The area surrounding the conservation reserve consists of largely undeveloped Crown land in which the dominant land uses are recreation and forestry (MECP 2021d). An existing transmission line corridor extends north to the City of Dryden and south to the Town of Atikokan. The corridor intersects the conservation reserve between Campus Lake, Mable Lake, and Sandford Lake to the east and Elsie Lake, Walt Lake, and Herb Lake to the west (MECP 2021d).



Campus Lake Conservation Reserve intersects 17,462.6 ha of the RSA (89.8% of the reserve's 19,440.8 ha area), 11,616.0 ha of the LSA (59.8% of the reserve's 19,440.8 ha area), and 91 ha of the Project footprint (0.5% of the reserve's 19,440.8 ha area).

The following features that support natural, historical, cultural, and recreational values are located in Campus Lake Conservation Reserve.

Natural Features: The Campus Lake Conservation Reserve is located on the boundaries between revised eco-regions 4W and 4S, in eco-districts 4W-1 and 4S-5 (MECP 2021d). The north is dominated by peat lands with low topographic relief and forest cover tends to be dominated by black spruce and tamarack (larch) (MECP 2021d). The southern portion of the conservation reserve tends to be dominated by conifer and hardwood mixed woods (MECP 2021d). Not including water, 17% of the area of the conservation reserve is classified as wetlands, with 33% being open wetland, while the remaining is treed or forested wetland types (MECP 2021d). In the conservation reserve, there has been a total of 36 ecosite types identified, including 23 upland types and 13 wetland types (MECP 2021d). In terms of bird species, there are five identified bald eagle nesting sites and one identified osprey-nesting site (MECP 2021d). Other avian species found include one great blue heron (Ardea herodias), common raven, pileated woodpecker (Dryocopus pileatus), belted kingfisher (Megaceryle alcyon), herring gull (Larus argentatus), ruffed grouse (Bonasa umbellus), spruce grouse, common loon (common loon), turkey vulture (Cathartes aura) and Canada jay (Perisoreus canadensis) (MECP 2021d). Additionally, there are 12 moose aquatic feeding areas that have been identified within the conservation reserve, other species noted within the conservation reserve include black bear, white-tailed deer, snowshoe hare, beaver, river otter, red squirrel, eastern garter snake (Thamnophis sirtalis sirtalis) and snapping turtle (Chelydra serpentina). Regarding fish species, within the waters of the conservation reserve there are lake trout (Salvelinus namaycush), lake whitefish (Coregonus clupeaformis), walleye (Sander vitreus), yellow perch (Perca flavescens), white sucker (Catostomus commersonii), northern pike (Esox lucius), and smallmouth bass (Micropterus dolomieu) (MECP 2021d). The conservation reserve contains 46 lakes, ranging in size from less than 1 ha to almost 3,000 ha, with the total water area within the conservation reserve being approximately 7,000 ha or 35% of the total area of the site (MECP 2021d). The conservation reserve also contains approximately 80 km of rivers and streams (MECP 2021d).

Cultural Features: It has been noted that there is minimal historical documentation that exists specific to the conservation reserve area (MECP 2021d). Therefore, the history of the area has been understood from sources that provide an overview of the history the surrounding areas or the region and some of this can be substantiated in part by physical evidence that remains of past human activities (MECP 2021d). The locations of some cultural heritage sites that have been identified within the conservation reserve are kept confidential owing to the sensitivity of such sites to disturbance (MECP 2021d). Based on information provided by the NWOMC and Region 2, cultural features have been identified that include a historic event site, historic trail, historic sites, a sacred/spiritual site, and contemporary gathering area. In addition, snow



machine trails and canoe routes have been identified by the NWOMC and Region 2 as being present.

Recreational Features: In the conservation reserve the primary users are guests of the tourist facilities and the few cottagers in the area (MECP 2021d). The amount of use by canoeists is not known; however, the condition of portage trails within the site notes that use is higher than might be expected (MECP 2021d). The conservation reserve contains one main base commercial tourism lodge on Sandford Lake, and one outpost cabin on Halfmoon Lake (MECP 2021d). A second lodge once operated on Sandford Lake but is now used as a private camp (MECP 2021d). There are a total of six private camps or cottages on the lakes within the conservation reserve, used primarily during the summer, gaining access by plane (MECP) 2021d). It was noted that no formally designated campsites exist on lakes within the conservation reserve, but informal and well-used sites exist throughout along Turtle River (MECP 2021d). There are a total of six active BMAs that overlap the conservation reserve (MECP 2021d). Boat caches do not exist within the southern portions of the conservation reserve and the lakes in the northern areas of the conservation reserve are in accordance with MNRF's boat cache policies (MECP 2021d). Portions of the provincial snow machine trail network pass through the conservation reserve, which are maintained and groomed by local snowmobile clubs (MECP 2021d). A second trail passes through Turtle River-White Otter Lake Provincial Park that is used to provide winter access to the White Otter Castle (MECP 2021d). Both commercial and non-commercial use of the area for activities such as wildlife viewing, nature study and appreciation, or more traditional pursuits such as hiking, camping, canoeing, and swimming, all within a remote, natural setting, have yet to be fully explored (MECP 2021d).

7.1.7.1.2.12 East Wabigoon Conservation Reserve

East Wabigoon Conservation Reserve is located approximately 35 km southeast from the City of Dryden (MECP 2021e). It encompasses the section of the Wabigoon River and surrounding wetland starting at the east end of Wabigoon Lake Ojibway Nation's Reserve land (MECP 2021e). The conservation reserve has a total area of 1,307.5 ha and is within the site region/district of 4S-4 and in the MNRF administrative region/district/area of Northwest Region/Dryden-Fort Frances-Atikokan District/Wabigoon Area, respectively, and Wabigoon Forest (MECP 2021e).

East Wabigoon Lake Conservation Reserve is wholly within the RSA (100% of the reserve's 1,307.5 ha area) 422.3 ha of the LSA (32.3% of the reserve's 1,307.5.8 ha area); however, none of it is within intersects the Project footprint.

The following features that support natural, historical, cultural, and recreational values are located in East Wabigoon Conservation Reserve.

Natural Features: Present in the conservation reserve is bedrock, upland forest, and forested dunes (mixed and conifer forest species), with 34 ha within the conservation reserve containing 113-year-old intermediate black spruce (MECP 2021e). There are also wetlands (open-water marshes, floating-leaved marshes, emergent marshes, mead marshes, low shrub fens, conifer



swamps, and thicket swamp) that have a probable ranking of provincial significance but have not been officially evaluated (MECP 2021e). The wild rice present is considered to have ecological and cultural significance, being used as food for waterfowl, as well as people (MECP 2021e). Mammal species in the conservation reserve include pied-billed grebe (*Podilymbus podiceps*), double-crested cormorant (*Phalacrocorax auritus*), wood duck (*Aix sponsa*), common goldeneye (*Bucephala clangula*), northern harrier (*Circus cyaneus*), broad-winged hawk (*Buteo platypterus*), black-capped chickadee, red-breasted nuthatch, veery (*Catharus fuscescens*), white-throated sparrow, red squirrel, beaver, and muskrat (MECP 2021e). The conservation reserve also contains a bald eagle nest just outside the conservation reserve's southeastern boundary (MECP 2021e). Additionally, the waters of the conservation reserve downstream of the Snake Bay Road bridge are designated as a fish sanctuary from April 1 to May 31 (MECP 2021e).

Cultural Features: Based on information provided by the NWOMC and Region 2, cultural features have been identified to include a historic occupation/camp/cabin, a sacred/spiritual site, and a historic trail, in addition to the presence of a snow machine trail and a motor boat route.

Recreational Features: Recreational features identified in this conservation reserve include an existing canoe route, river, edible aquatic foods, wetland vegetation, mixed coniferous/deciduous forest, and wildlife (MECP 2021e). Present and potential recreational activities noted are boating, canoeing, fishing, hunting, trapping, collecting/gathering and nature activities (MECP 2021e). One commercial boat cache is present on the Wabigoon River (MECP 2021e). 2021e).

7.1.7.1.2.13 Melgund Lake Conservation Reserve

Melgund Lake Conservation Reserve is located approximately 40 km southeast of the City of Dryden on Melgund Lake (MECP 2021h). The conservation reserve has a total area of 1,094.1 ha and is located within the site region/district of 4S-3 and in the MNRF administrative region/district/area of Northwest Region/Dryden-Fort Frances-Atikokan District/Wabigoon Area, respectively, and Wabigoon Forest (MECP 2021h).

The Melgund Lake Conservation Reserve is located wholly within the RSA (100% of the reserve's 1,094.1 ha area), A portion of the Melgund Lake Conservation Reserve intersects the LSA (55.5% or 607.1 ha of the reserve's 1,094.1 ha area); however, none of it intersects with the Project footprint.

The following features that support natural, historical, cultural, and recreational values are located in Melgund Lake Conservation Reserve.

Natural Features: The conservation reserve is composed of bedrock and surficial geology, with upland forest and forested dunes (with mixedwood and conifer species), and wetlands (MECP 2021h). Identified mammal species include moose, bald eagle, loon, beaver, sandhill crane (*Grus canadensis*), pileated woodpecker, and ermine (*Mustela erminea*) (MECP 2021h).



Cultural Features: Cultural features at the conservation reserve include fire pits, wood pole framework, table and benches, and outhouses (MECP 2021h). Based on information provided by the NWOMC and Region 2, cultural features have been identified to include a historic occupation/camp/cabin site and the presence of a snow machine trail.

Recreational Features: Four commercial boat caches exist on Melgund Lake; however, they are not within the conservation reserve boundaries (MECP 2021h). Recreational fishing is permitted, and it was noted that there are opportunities for fishing, summer camping, shore lunch activities, hunting, and trapping within the conservation reserve (MECP 2021h).

7.1.7.1.2.14 Pyatt Lake Conservation Reserve

Pyatt Lake Conservation Reserve is located approximately 54 km southeast of the City of Dryden and is composed of a total of 401 ha (MECP 2021i). It is within the site region/district of 4S-4 and in the MNRF administrative region/district/area of Northwest Region/Dryden-Fort Frances-Atikokan District/Dryden Area, respectively, and Dryden Forest, as well as Wabigoon Area/Wabigoon Forest to a smaller extent (MECP 2021i).

Pyatt Lake Conservation Reserve is wholly within the RSA and LSA (100% of the reserve's 401 ha area); however, none of it is within the Project footprint.

The following features that support natural, historical, cultural, and recreational values are located in Pyatt Lake Conservation Reserve.

Natural Features: The conservation reserve is composed of upland forest and forested dunes, and wetlands (MECP 2021i). Identified mammal species include sandhill cranes, gray jays, red squirrels, and moose (MECP 2021i). The area has an earth science representation of bedrock and surficial geology, as well as organic deposits making up 50% of the conservation reserve (MECP 2021i). It was noted that zig-zag darner (*Aeshna sitchensis*), provincially rare dragonfly twig rush, starved sedge (*Carex depauperata*), livid sedge (*Carex livida*), and yellow-eyed grass (*Sisyrinchium californicum*) are rare in northwestern Ontario and have been identified in this conservation reserve (MECP 2021i). Additionally, there have been royal fern found, which is an unusual habitat for locally uncommon species (MECP 2021i).

Cultural Features: Based on information provided by the NWOMC and Region 2, cultural features have been identified to include a historic occupation/camp/cabin site and the presence of a snow machine trail.

Recreational Features: Bird watching and wildlife viewing are considered potential recreation activities determined for the conservation reserve (MECP 2021i).

7.1.7.1.2.15 Areas of Natural and Scientific Interest

Mokomon ANSI

The Mokomon ANSI is an Earth Science ANSI comprised of a small but representative section of the Marks Moraine and is located along Brule Creek, which is in the southeastern area of the



Brule Creek Watershed, south of the confluence with the Kaministiquia River (north of Kakabeka Falls) (LRCA 2007). The Marks Moraine is a 50 km long feature formed during glacial retreat and varies from 1.6 to 4.6 km in width. There is a gravel pit located south of Mokomon Road that has been occasionally used, and construction of the CN railway in the past may have moved portions of the moraine from the northeast corner (Lakehead Region Conservation Authority 2007; MNRF 2022h). Based on information available within the MNRF Crown Land Use Policy Atlas, the Mokomon ANSI is located on private lands and, therefore, is subject to conformance with the *Planning Act* (MNRF 2023a; MNRF 2023b).

The Mokomon ANSI is wholly within the RSA (100% of the ANSI's 140.5 ha area); however, none of it intersects with the LSA or the Project footprint.

Swamp River ANSI

The Swamp River ANSI is an Earth Science ANSI located north of Highway 11, directly east of Swamp River, approximately 1 km west of the turn-off to Shebandowan. The Swamp River ANSI is a single large bedrock outcrop consisting of a well-developed pillow lava structure. The structure consists of basic lava of Archaean age that has been regionally metamorphosed to greenstone. The pillows are elongated, and in places reach up to 4 m in length. In addition to the pillow lava structure, the greenstone at the Swamp River ANSI contains an abundance of vesicles caused by the escape of contained gases formed from previous volcanic activity. The vesicles are distributed throughout the pillows but are concentrated along the north sides of the structure. The Swamp River ANSI is approximately 140.5 ha in size (MNRF 2022h). Based on information available within the MNRF Crown Land Use Policy Atlas, the Swamp River ANSI is located on private lands and, therefore, is subject to conformance with the *Planning Act* (MNRF 2023a; MNRF 2023b).

The Swamp River ANSI intersects 3.9 ha of the RSA and LSA (2.8% of the ANSI's 140.5 ha area), and 0.6 ha (0.4% of the ANSI's 140.5 ha area) intersects with the Project footprint.

Thunder Bay Lookout ANSI

The Thunder Bay Lookout ANSI is an Earth Science ANSI located in the northeast portion of the City of Thunder Bay along Highway 11/17, west of Copenhagen Road. This ANSI offers an exposure of gunflint bedrock formation (City of Thunder Bay 2019; MNRF 2022h). Based on information available within the MNRF Crown Land Use Policy Atlas, the Thunder Bay Lookout ANSI is located on private lands and, therefore, is subject to conformance with the *Planning Act* and the City of Thunder Bay Official Plan (2018) (MNRF 2023a; MNRF 2023b).

The Thunder Bay Lookout ANSI intersects 0.8 ha of the RSA and LSA (100% of the ANSI's 0.8 ha area); however, none of it intersects with the Project footprint.

Intola ANSI

The Intola ANSI is an Earth Science ANSI located in eastern portion of the Municipality of Oliver Paipoonge west of Townline Road and east of Nicholetts Road. Additional information regarding details about the ANSI were not available. The ANSI is approximately 31.8 ha in size (MNRF



2022h). Based on information available within the MNRF Crown Land Use Policy Atlas, the Intola ANSI is located on private lands and, therefore, is subject to conformance with the *Planning Act* and the Municipality of Oliver Paipoonge Official Plan (2018) (MNRF 2023a; MNRF 2023b).

The Intola ANSI is wholly within the RSA; however, none of it is within the LSA or the Project footprint.

7.1.7.1.2.16 Enhanced Management Areas

White Otter Enhanced Management Area

The White Otter Enhanced Management Area provides opportunity for forest management activities to be regulated in a manner that will facilitate future recreation, tourism, and resource use to avoid undesirable impacts on parks and/or conservation areas located nearby, including Campus Lake Conservation Reserve and Turtle River-White Otter Provincial Park (MECP 2021m).

The White Otter Enhanced Management Area intersects 4,260.0 ha of the RSA (78.4% of the area's 5,433.7 ha area), 2,136.3 ha of the LSA (39.3% of the park's 5,433.7 ha area), and 61.3 ha of the Project footprint (1.1% of the area's 5,433.7 ha area).

The White Otter Enhanced Management Area acts as a corridor between the Campus Lake Conservation Reserve and Turtle River-White Otter Provincial Park and is considered a remote access enhanced management area (MNRF 2021d).

7.1.7.2 Land Use Planning

7.1.7.2.1 Federal Land Use Policies and Designations

This section summarizes the federal land use policies and designations that have the potential to be applicable to the Project.

7.1.7.2.1.1 First Nations Land Management Act

Under the *Indian Act*, a reserve is defined as a parcel of land where legal title is held by the Crown (Government of Canada), for the use and benefit of a particular First Nation. First Nations and Band Councils have limited authority in terms of administration and retention of the reserve under the *Indian Act (Indian Act, 1985)*. The *First Nations Land Management Act* was enacted in 1999 and is federal legislation that works to provide First Nation communities autonomy over laws and land management *Act*, 1999). No First Nation reserve lands are crossed by the Project footprint, so the Project does not include areas subject to this Act.

The Wabigoon Lake Ojibway Nation is the only First Nation with reserve lands that intersect the RSA. In total, 3,217.2 ha of Wabigoon Lake Ojibway Nation lands intersect the RSA and 439.4 ha intersect the LSA. No reserve lands are crossed by the Project footprint.



7.1.7.2.2 Provincial and Regional Land Use Policies and Designations

This section summarizes the provincial and municipal land use policies and designations applicable to the Project. A range of provincial and regional land use policies and designations apply to the Project. Key land use policies, guidelines, and designations considered in relation to transmission and distribution line development include:

- The Planning Act (1990);
- The Provincial Policy Statement (PPS) (2020);
- The Growth Plan for Northern Ontario (2011);
- The Northern Services Board Act (1990);
- Local Roads Boards;
- Rural Planning Boards; and
- The Crown Land Use Policy Atlas (CLUPA).

7.1.7.2.2.1 The Planning Act and Provincial Policy Statement

Within the Province of Ontario, the Project should be consistent with the PPS (PPS 2020) (Planning Act 1990; MMAH 2020). The *Planning Act* sets out the foundational rules for how land use planning may occur in Ontario and how the land is settled, infrastructure is designed and built, and how land and resources are managed. Compliance and conformity with provincial plans are prescribed in Section 5 (b) of the *Planning Act* stating that:

"A decision of the council of a municipality, a local board, a planning board, a minister of the Crown and a ministry, board, commission or agency of the government, including Municipal Board, in respect of the exercise of any authority that affects a planning matter, shall conform with the provincial plans that are in effect on that date, or shall not conflict with them, as the case may be."

The PPS, issued on May 1, 2020, in accordance with Section 3 of the *Planning Act*, states that provincial plans should be read in conjunction with the PPS and shall take precedence over other PPS policies in instances of conflict unless another relevant legislature provides otherwise.

Municipalities implement PPS 2020 through an official plan, which may further outline land use planning within the RSA (Planning Act 1990; MMAH 2020). These are discussed further in Section 7.1.7.2.3 (Municipal Land Use Policies and Designations).

The Ministry of Transportation (MTO) is also a commenting agency for land use planning applications under the *Planning Act*. The MTO provides recommendations to the planning approval authority but does not have approval authority for applications under the *Planning Act* (MTO 2023). When a municipality or site is within the MTO Controlled Areas, the MTO reviews



municipal planning applications throughout the municipal land use planning process and provides feedback (MTO 2023). The feedback to land use planning authorities and land developers is intended to serve the transportation and land use interests of the public, preserve the function, safety, and operation of the provincial highway network, and contribute to the objectives of the PPS and other provincial legislations, including transportation and land use studies, and growth plans (MTO 2023).

- MTO designated lands that include lands designated for "controlled access" include 8.0 ha in the Project footprint, 1,355.9 ha in the LSA, and 1,594.6 ha in the RSA.
- MTO designated lands that include lands designated for "non-controlled access" include 8.6 ha in the Project footprint, 53.7 ha in the LSA, and 65.7 ha in the RSA.

Table 7.1-6 outlines the frequency and area of MTO designated lands that are within the Project footprint, LSA, and RSA.











MTO Controlled Areas	Frequency of Occurrence in the Project Footprint	Area in the Project footprint (ha)	Frequency of Occurrence in the LSA	Area in the LSA (ha)	Frequency of Occurrence in the RSA	Area in the RSA (ha)
Controlled Access	5	8.0	11	1,355.9	15	1,594.6
Non- Controlled Access	9	8.6	69	53.7	75	65.7

 Table 7.1-6:
 Ministry of Transportation Designated Lands in the Study Areas

Source: (MTO 2023)

Note: Some numbers are rounded for presentation purposes.

Ha = hectares; LSA = Local Study Area; MTO = Ministry of Transportation; RSA = Regional Study Area





7.1.7.2.2.2 The Growth Plan for Northern Ontario

The Growth Plan for northern Ontario was released on March 3, 2011 and is a 25-year plan that provides guidance for provincial decision-making and investment for economic and population growth in northern Ontario (MMAH 2011).

The Growth Plan was prepared under the *Places to Grow Act, 2005* and sets out the following principles:

- Enable decisions about growth to be made in ways that sustain a robust economy, build strong communities and promote a healthy environment and a culture of conservation;
- Promote a rational and balanced approach to decisions about growth that builds on community priorities, strengths and opportunities and makes efficient use of infrastructure;
- Enable planning for growth in a manner that reflects a broad geographical perspective and is integrated across natural and municipal boundaries; and
- Ensure that a long-term vision and long-term goals guide decision-making about growth and provide for the co-ordination of growth policies among all levels of government (MMAH 2011).

The key growth management goals for the Growth Plan for Northern Ontario include:

- Diversifying of traditional resource-based industries;
- Workforce education and training;
- Integration of infrastructure investments and planning; and
- Tools for Indigenous peoples' participation in the economy (MMAH 2011).

Section 5.1 of the Growth Plan for Northern Ontario provides policies for infrastructure in northern Ontario, noting that investment in northern Ontario's energy generation and transmission infrastructure supports the growth and development of the energy sector and also provides secure and reliable energy supply for all sectors of the northern economy (MMAH 2011). Section 5.6 of the Plan provides policies to guide the identification of investment opportunities in northern Ontario's transmission and distribution systems, to maintain reliability, meet new and growing demands, and accommodate renewable energy generation (MMAH 2011).

The Plan supports the alignment and coordination of infrastructure investments to support economic development priorities and meet the needs of existing and future communities (MMAH 2011).



The Growth Plan for Northern Ontario should be read in conjunction with other policy documents regarding public lands including the Crown Land Use Policy Atlas and community-based land-use plan or provincial policy statement.

7.1.7.2.2.3 The Northern Services Board Act

A Local Services Board (LSB) is a volunteer organization that has the authority to deliver approved services to residents in unincorporated rural areas of northern Ontario where there is no municipal government (MND 2023). This authority is granted under Regulation 737 of the *Northern Services Boards Act* (NSBA) (MND 2023; *Northern Services Boards Act*, 1990).

Each LSB is authorized to deliver the powers or services that have been designated to it in an order of the minister from the list of available powers in the Act (MND 2023). Each LSB can deliver between one to nine basic services. These services include (MND 2023):

- Water supply;
- Fire protection;
- Garbage collection;
- Sewage management;
- Street and area lighting;
- Recreation services;
- Road maintenance;
- Public library services; and
- Emergency telecommunications.

An LSB cannot enact regulations enforcing building code or traffic violations, or authorize, regulate, or license individuals, groups, or businesses (MND 2023). Additionally, an LSB can comment on, or consent to, matters that fall within its designated powers, but is unable to comment on economic development planning and building planning (MND 2023).

The LSBs in the RSA include:

- District of Thunder Bay:
 - East Gorham LSB (townships of Gorham and Jacques);
 - Kaministiquia LSB;
 - Lappe LSB;
 - Shebandowan LSB; and



- Upsala LSB.
- District of Rainy River: No LSBs are located within the District of Rainy River.
- District of Kenora:
 - · Wabigoon LSB; and
 - Greater Oxdrift LSB (Townships of Aubrey, Britton, Brownbridge, Eton, Rugby, Van Horne, Wainwright, and Zealand).

7.1.7.2.2.4 Local Roads Boards

Similar to LSBs, there are formal organizations that service local roads in unincorporated Northern Ontario:

- Statute Labour Boards (SLBs);
- Special Maintenance Agreements (50-50 Agreements); and
- Local Roads Boards (LRBs).

LRBs are volunteer bodies tasked by the MTO to determine the work to be performed on local roads in the local roads area and enter into contracts to complete the work. For work which does not fall into the above categories, LRBs are responsible for levying one-third of all funds to service roads in need of repair, while the rest of covered by the MTO, whose budget for unincorporated roads is funded by the MENDM (Northern Policy Institute 2021).

Property owners in the LRB pay their share via property taxes to the provincial land tax office of the Ministry of Finance, which remits the money to a fund that the MTO accesses and combines with its two-thirds share to pay third-party contractors to carry out the work on the LRB area. In the Province of Ontario, LRAs are regulated under the *Local Roads Boards Act*, R.S.O. 1990, c. L.27 (*Local Roads Boards Act*, 1990; Northern Policy Institute 2021).

7.1.7.2.2.5 Rural Planning Boards

The municipal structure in northern Ontario results in land-use planning that is shared by the MMAH, MNRF, and rural planning boards (Northern Policy Institute 2021). These rural planning boards encompass both small municipalities and unincorporated areas, with their role being to develop official plans, manage zoning by-laws, and advise municipal governance and the MMAH on matters related to land use planning (Northern Policy Institute 2021).

7.1.7.2.2.6 Crown Land Policy

This policy provides direction on how the MNRF manages Crown lands, while defining management of Crown lands in the Province of Ontario. The Crown Lands Policy also identifies the mission, goals, and principles for managing Crown land, including the MNRF's guiding principles for Crown land management and land disposition (MNRF 2022b).



The Crown Land Policy provides direction in relation to the following:

- Lands administration;
- Public land stewardship;
- Public land management;
- Renewable energy;
- Rents/fees for the public lands under the Ministry's control; and
- Compliance.

Crown Land Use Policy Atlas

In 2004, the MNRF launched the online CLUPA, which consolidated land use policy direction for provincial Crown lands. It is the central website for presenting proposed and approved land use amendments. The CLUPA provides area-specific land use policy information for Crown lands throughout the province (MNRF 2022b; MNRF 2023b). The CLUPA land use designations present in the Project footprint include forest reserves, general use areas, provincial parks, conservation reserves, and enhanced management areas as defined by the CLUPA (MNRF 2023b).

General use areas are lands without enhanced management area or other specific designations, where a wide range of resource and recreational uses are permitted to occur. MNRF policies and guidelines direct the management of resources and activities in this area (MNRF 2021a).

The CLUPA land use designations in the Project footprint are outlined in Table 7.1-7 and additional details related to CLUPA-specific management designations are expanded upon in Table 7.1-8.



				-			
Policy Number	Type of CLUPA Policy Area	Name of CLUPA Policy Area	Total Area of CLUPA Policy Area (ha)	Total Area of CLUPA Policy Area in the ROW (ha)	% of Total CLUPA Policy Area in the ROW	Total Area of CLUPA Policy Area in the Project Footprint (ha)	% of Total CLUPA Policy Area in the Project Footprint
General Land Use Area							
G2545	General Use Area	Agimak Lake	44,310.5	135.8	0.3%	538.1	1.2%
G2544	General Use Area	Bending Lake	145,537.1	87.5	0.1%	643.5	0.4%
G2511	General Use Area	Clay, Perrault, Route, Melgund and Tot Lakes Area	443,340.2	10.9	<0.1%	13.7	<0.1%
G2531	General Use Area	Dryden, Vermilion Bay and Area	138,478.7	225.6	0.2%	558.2	0.4%
G2533	General Use Area	Eagle, Wabigoon, Stormy, Kawashegamuk Lakes	255,871.2	N/A	0.0%	26.7	<0.1%
G2568	General Use Area	Finlayson	226,746.6	25.6	<0.1%	79.0	<0.1%
G2569	General Use Area	Greytrout	152,698.3	109.2	0.1%	416.0	0.3%
G2562	General Use Area	Highway 11	56,904.3	184.9	0.3%	494.1	0.9%
G2624	General Use Area	Hinterland	1,873,156.3	331.3	<0.1%	914.5	<0.1%
G2629	General Use Area	Huronian	29,942.2	28.6	0.1%	57.8	0.2%
G2630	General Use Area	Kashabowie / Burchell	17,162.6	6.7	<0.1%	9.0	0.1%

Table 7.1-7: CLUPA Land Use Designations in the Project Footprint





Policy Number	Type of CLUPA Policy Area	Name of CLUPA Policy Area	Total Area of CLUPA Policy Area (ha)	Total Area of CLUPA Policy Area in the ROW (ha)	% of Total CLUPA Policy Area in the ROW	Total Area of CLUPA Policy Area in the Project Footprint (ha)	% of Total CLUPA Policy Area in the Project Footprint
G2547	General Use Area	Kathleen / Phyllis Lakes	38,520.3	28.7	0.1%	75.7	0.2%
G2546	General Use Area	Mameigwess Lake	157,960.1	0	0%	0.0	0%
G2548	General Use Area	Megikons / Crystal River	278,569.9	9.9	<0.1%	18.3	<0.1%
G2625	General Use Area	Rural Areas	324,798.5	234.3	0.1%	780.5	0.2%
G2699	General Use Area	Shebandowan Lake	12,336.3	49.2	0.4%	72.1	0.6%
G2567	General Use Area	Steep Rock	4,166.6	10.7	0.3%	19.2	0.5%
G2620	General Use Area	Thunder Bay Urban Area	33,776.9	0	0.0%	38.2	0.1%
G2566	General Use Area	Township of Atikokan	993.4	91.1	0.3%	195.1	0.6%
G2565	General Use Area	Townsite Atikokan	30,937.1	0	0.0%	9.2	0.9%
Provincial Parks							
P2588	Provincial Park	Quetico Provincial Park (Wilderness Class)	471,937.6	0	0.0%	0.6	<0.1%
P2304e	Provincial Park	Turtle River- White Otter Lake Provincial Park (Waterway Class)	49,288.5	2.4	<0.1%	12.6	<0.1%



Policy Number	Type of CLUPA Policy Area	Name of CLUPA Policy Area	Total Area of CLUPA Policy Area (ha)	Total Area of CLUPA Policy Area in the ROW (ha)	% of Total CLUPA Policy Area in the ROW	Total Area of CLUPA Policy Area in the Project Footprint (ha)	% of Total CLUPA Policy Area in the Project Footprint
Conservation Reserve							
C2299	Conservation Reserve	Campus Lake Conservation Reserve	19,440.8	56.0	0.3%	91.0	0.5%
Enhanced Management Area							
E2414a	Enhanced Management Area	White Otter	5,433.7	23.5	0.4%	61.3	1.1%

Source: (MNRF 2023a)

% = percent; < = less than; CLUPA = Crown Land Use Policy Atlas; ha = hectare; ROW = right-of-way.

Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint				
General Land Use Area							
G2545	Agimak Lake	 Management of this area is governed by: Crown Land Disposition Policy – Appendix A (2008); Ignace District Land Use Guidelines (1983); Inland Ontario Lakes Designated for Lake Trout Management (2006); and Amendment to Area specific Crown Land Use Policy #2007-025 (2009) (Update to Area-specific Land Use Policy to Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lakes). 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area. Aggregate extraction is permitted within the Project footprint. There are no restrictions for Crown Land Dispositions related to the Project footprint. New and existing access roads are 				
		 Permitted activities include aggregate extraction. 	permitted within the Project footprint.				

Table 7.1-8: Applicable CLUPA Policy Report Details in the Project Footprint



Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint
		 Crown land dispositions permitted (except for agricultural, rural residential use and on designated trout lakes). 	
		 Public road infrastructure (new and existing) is permitted taking into consideration alignment with existing management strategies (i.e., Forest Management Planning documents, highway and/or road development plans). 	
		 Management of this area is governed by: Crown Land Disposition Policy – Appendix A (2008); 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area.
	Bending Lake	 Ignace District Land Use Guidelines (1983); Inland Ontario Lakes Designated for Lake Trout Management (2006); and 	 Aggregate extraction is permitted within the Project footprint.
		 Amendment to Area specific Crown Land Use Policy #2007-025 (2009) 	 There are no restrictions for Crown Land Dispositions related to the Project
G2544		 Amendment to Area-specific Crown Land Use Policy #2004-029 (2004) Update to Area-specific Land Use Policy to Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lakes. 	 New and existing access roads are permitted within the Project footprint. Bending Lake does not overlap the
	-	 Permitted activities include aggregate extraction. 	Project footprint.
		 Crown land dispositions permitted (except for agricultural, rural/urban residential use and on designated trout lakes). 	
		 Public road infrastructure (new and existing) is permitted taking into consideration alignment with existing management strategies (i.e., Forest Management Planning documents, highway and/or road development plans). There are limitations for new roads at Bending Lake. 	
		 Roads must protect remote angling opportunities. 	


Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint
G2511	Clay, Perrault, Route, Melgund and Tot Lakes Area	 Management of this area is governed by: Crown Land Disposition Policy – Appendix A (2008); Dryden District Land Use Guidelines (1983); Inland Ontario Lakes Designated for Lake Trout Management (2006); and Amendment to Area specific Crown Land Use Policy #2007-025 (2009). Update to Area-specific Land Use Policy to Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lakes. Range Management Policy in Support of Woodland Caribou Conservation and Recovery (2014); and Amendment to Area-specific Crown Land Use Policy #2014-007 (2014). Update of area-specific land use policy to reflect the Range Management Policy in Support of Woodland Caribou Conservation and Recovery (2014) under the Caribou Conservation Plan (2009) Permitted activities include aggregate extraction. Crown land dispositions permitted (except for agricultural, urban residential use and on designated trout lakes). Public road infrastructure (new and existing) is permitted taking into consideration alignment; however, roads will be located and managed consistent with the concept of multiple use and generally be considered to be open to all users. 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area. Aggregate extraction is permitted within the Project footprint. There are no restrictions for Crown Land Dispositions related to the Project footprint. New and existing access roads are permitted within the Project footprint; however, access roads should remain open to all users. The Range Management Policy in Support of Woodland Caribou Conservation and Recovery is limited to the area of continuous caribou distribution defined by MNRF, The Project footprint is located outside of the continuous distribution area.



Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint
G2531	Dryden, Vermilion Bay and Area	 Management of this area is governed by: Crown Land Disposition Policy – Appendix A (2008); Dryden District Land Use Guidelines (1983); Inland Ontario Lakes Designated for Lake Trout Management (2006); and Amendment to Area specific Crown Land Use Policy #2007-025 (2009). Update to Area-specific Land Use Policy to Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lakes. Range Management Policy in Support of Woodland Caribou Conservation and Recovery (2014); and Amendment to Area-specific Crown Land Use Policy #2014-007 (2014). Update of area-specific land use policy to reflect the Range Management Policy in Support of Woodland Caribou Conservation and Recovery (2014) under the Caribou Conservation Plan (2009). Permitted activities include aggregate extraction. Crown land dispositions are permitted (except on designated Lake tTout Lakes). Public road infrastructure (new and existing) is permitted taking into consideration alignment with existing management strategies (i.e., Forest Management Planning documents, highway and/or road development plans). Roads will be located and managed consistent with the concept of multiple use and generally be considered to be open to all users. 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area. Aggregate extraction is permitted within the Project footprint. There are no restrictions for Crown Land Dispositions related to the Project footprint. New and existing access roads are permitted within the Project footprint; however, access roads should remain open to all users. The Range Management Policy in Support of Woodland Caribou Conservation and Recovery is limited to the area of continuous caribou distribution defined by MNRF, The Project footprint is located outside of the continuous distribution area.



Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint
G2568	Finlayson	 Management of this area is governed by: Crown Land Disposition Policy – Appendix A (2008); Inland Ontario Lakes Designated for Lake Trout Management (2006); and Amendment to Area specific Crown Land Use Policy #2007-025 (2009). Update to Area-specific Land Use Policy to Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lakes. Atikokan District Fisheries Management Plan (1988); Sapawe Forest Management Plan (2000); and Crossroute Forest Management Plan (2002). Aggregate extraction is permitted. Crown land dispositions permitted (except for rural/urban residential use and on designated trout lakes). Public road infrastructure (new and existing) is permitted taking into consideration alignment with existing management strategies (i.e., Forest Management Planning documents, highway and/or road development plans). 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area. Aggregate extraction is permitted within the Project footprint. There are no restrictions for Crown Land Dispositions related to the Project footprint. New and existing access roads are permitted.





Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint
G2569	Greytrout	 Management of this area is governed by: Crown Land Disposition Policy – Appendix A (2008); Inland Ontario Lakes Designated for Lake Trout Management (2006); and Amendment to Area specific Crown Land Use Policy #2007-025 (2009). Update to Area-specific Land Use Policy to Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lake. Amendment to Area-specific Crown Land Use Policy #2002-011 (2003) Atikokan District Land Use Guidelines (1983) Atikokan District Fisheries Management Plan (1988); Sapawe Forest Management Plan (2000); and Crossroute Forest Management Plan (2002). Aggregate extraction permitted. Crown land dispositions permitted (except for rural residential use and on designated trout lakes). Public road infrastructure (new and existing) is permitted taking into consideration alignment with existing management strategies (i.e., Forest Management Planning documents, highway and/or road development plans). Road access should be managed for resource production and low-density recreation use. Area(s) of Concern: Atomic Energy of Canada Ltd. Drill exploration site at Forsberg Lake, 120 m buffer present for natural trout lakes. 	 The Project footprint overlaps designated Lake Trout Lakes including Crowrock Lake and Forsberg Lake. Aggregate extraction is permitted within the Project footprint. There are no restrictions for Crown Land Dispositions related to the Project footprint except for restrictions related to designated Lake Trout Lakes (PL 4.02.01 Appendix A). New and existing access roads are permitted; however, road access to the area will be managed for resource production and low-density recreation. The Project footprint overlaps the Forsberg Lake Atomic Energy of Canada Ltd. Drill exploration site AOC along an existing access road with potential improvements.



Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint
G2562	Highway 11	 Management of this area is governed by: Crown Land Disposition Policy – Appendix A (2008); Atikokan District Land Use Guidelines (1983); Atikokan District Highway Plan (1985); Inland Ontario Lakes Designated for Lake Trout Management (2006); and Amendment to Area specific Crown Land Use Policy #2007-025 (2009). Update to Area-specific Land Use Policy to Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lake. Atikokan District Fisheries Management Plan (1988); Sapawe Forest Management Plan (2000); and Crossroute Forest Management Plan (2002). Aggregate extraction permitted. Crown land dispositions permitted (except for rural/urban residential use and on designated trout lakes). Public road infrastructure (new and existing) is permitted taking into consideration alignment with existing management strategies (i.e., Forest Management Planning documents, highway and/or road development plans). Road guidelines will apply on Lake Trout Lakes (Policy #2007-25). Area(s) of Concern: 120 m buffer present for natural trout lakes, 200 m no-cut area for cottaging lakes including Nickleby, Crooked Pine, Kawene and South of Como Lakes for all lots 2 ha or less. 	 The Project footprint overlaps designated Lake Trout Lakes including Nym Lake. Aggregate extraction is permitted within the Project footprint. There are no restrictions for Crown Land Dispositions related to the Project footprint except for restrictions related to designated Lake Trout Lakes (PL 4.02.01 Appendix A) and cottaging lakes including Nickleby Lake. The Project footprint does not overlap Crooked Pine Lake, Kawene Lake, or South of Como Lake. New and existing access roads are permitted. Road guidelines will apply on Lake Trout Lakes.



Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint
G2624	Hinterland	 Management of this area is governed by: Crown Land Disposition Policy – Appendix A (2008); Thunder Bay District Land Use Guidelines (1983) Inland Ontario Lakes Designated for Lake Trout Management (2006); and Amendment to Area specific Crown Land Use Policy #2007-025 (2009). Update to Area-specific Land Use Policy to Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lakes. Range Management Policy in Support of Woodland Caribou Conservation and Recovery (2014); and Amendment to Area specific Crown Land Use Policy #2014-007 (2014). Amendment to Area specific Crown Land Use Policy #2019-008 (2019) Update of area-specific land use policy to reflect the Range Management Policy in Support of Woodland Caribou Conservation and Recovery (2014) under the Caribou Conservation Plan (2009). Aggregate extraction permitted. Crown land dispositions permitted (except for urban residential use and on designated trout lakes). Public road infrastructure (new and existing) is permitted taking into consideration alignment existing management strategies (i.e., Forest Management Planning documents, highway and/or road development plans). New and existing roads must maintain low-intensity public road use. Lake trout lakes and other important fish and wildlife habitats will also be protected through road planning 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area. Aggregate extraction is permitted within the Project footprint. There are no restrictions for Crown Land Dispositions related to the Project footprint. New and existing access roads are permitted; however, access roads must maintain low intensity public road use. The Range Management Policy in Support of Woodland Caribou Conservation and Recovery is limited to the area of continuous caribou distribution defined by MNRF, The Project footprint is located outside of the continuous distribution area.



Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint
G2629	Huronian	 Management of this area is governed by: Crown Land Disposition Policy – Appendix A (2008); Thunder Bay District Land Use Guidelines (1983) Inland Ontario Lakes Designated for Lake Trout Management (2006); and Amendment to Area specific Crown Land Use Policy #2007-025 (2009). Update to Area-specific Land Use Policy to Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lakes. Aggregate extraction permitted. Crown land dispositions may be permitted (except for agricultural, urban/rural residential use and on designated trout lakes). Public road infrastructure (new and existing) is permitted taking into consideration alignment with existing management strategies (i.e., Forest Management Planning documents, highway and/or road development plans). 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area. Aggregate extraction is permitted within the Project footprint. There are no restrictions for Crown Land Dispositions related to the Project footprint. New and existing access roads are permitted.



Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint
G2630	Kashabowie/ Burchell	 Management of this area is governed by: Crown Land Disposition Policy – Appendix A (2008); Thunder Bay District Land Use Guidelines (1983) Inland Ontario Lakes Designated for Lake Trout Management (2006); and Amendment to Area-specific Crown Land Use Policy #2005-008 (2005). Amendment to Area specific Crown Land Use Policy #2007-025 (2009). Update to Area- specific Land Use Policy to Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lakes. Aggregate extraction permitted. Crown land dispositions may be permitted (except for agricultural, urban/rural residential use and on designated trout lakes). Public road infrastructure (new and existing) is permitted taking into consideration alignment with existing management strategies (i.e., Forest Management Planning documents, highway and/or road development plans). New and existing roads should consider needs for forestry/mining activities. 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area. Aggregate extraction is permitted within the Project footprint. There are no restrictions for Crown Land Dispositions related to the Project footprint. New and existing access roads are permitted; however, access roads must consider needs for forestry and mining activities.



Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint
G2547	Kathleen/ Phyllis Lakes	 Management of this area is governed by: Crown Land Disposition Policy – Appendix A (2008); Ignace District Land Use Guidelines (1983); Inland Ontario Lakes Designated for Lake Trout Management (2006); and Amendment to Area specific Crown Land Use Policy #2007-025 (2009). Update to Area-specific Land Use Policy to Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lakes. Aggregate extraction permitted. Crown land dispositions may be permitted (except for agricultural, urban/rural residential, cottaging use and on designated trout lakes). Public road infrastructure (new and existing) is permitted taking into consideration alignment with existing management strategies (i.e., Forest Management Planning documents, highway and/or road development plans). 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area. Aggregate extraction is permitted within the Project footprint. There are no restrictions for Crown Land Dispositions related to the Project footprint. New and existing access roads are permitted.
G2546	Mameigwess Lake	 Management of this area is governed by: Crown Land Disposition Policy – Appendix A (2008); Ignace District Land Use Guidelines (1983); Inland Ontario Lakes Designated for Lake Trout Management (2006); and Amendment to Area-specific Crown Land Use Policy #2003-012 (2003). Amendment to Area-specific Crown Land Use Policy #2004-022 (2004). Amendment to Area specific Crown Land Use Policy #2007- 025 (2009). Update to Area-specific Land Use Policy to Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lakes. Aggregate extraction permitted. Crown land dispositions may be permitted (except for agricultural, urban/rural residential use and on designated trout lakes). 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area. Aggregate extraction is permitted within the Project footprint. There are no restrictions for Crown Land Dispositions related to the Project footprint. New and existing access roads are permitted.



Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint
		 Public road infrastructure (new and existing) is permitted taking into consideration alignment with existing management strategies (i.e., Forest Management Planning documents, highway and/or road development plans). 	
G2548	Megikons/ Crystal River	 Management of this area is governed by: Crown Land Disposition Policy – Appendix A (2008); Ignace District Land Use Guidelines (1983); Inland Ontario Lakes Designated for Lake Trout Management (2006); Amendment to Area specific Crown Land Use Policy #2007-025 (2009). Update to Area-specific Land Use Policy to Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lakes. Range Management Policy in Support of Woodland Caribou Conservation and Recovery (2014); and Amendment to Area-specific Crown Land Use Policy #2014-007 (2014). Update of area-specific land use policy to reflect the Range Management Policy in Support of Woodland Caribou Conservation and Recovery (2014) under the Caribou Conservation Plan (2009). Aggregate extraction is not permitted. Crown land dispositions may be permitted (except for agricultural, urban/rural residential use and on designated trout lakes). Public road infrastructure (new and existing) is permitted taking into consideration alignment with existing management strategies (is a Errort Management 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area. Aggregate extraction is not permitted in the Project footprint; however, there are no aggregate sites within the Project footprint that also overlap the Megikons/Crystal River policy area. There are no restrictions for Crown Land Dispositions related to the Project footprint. New and existing access roads are permitted. The Range Management Policy in Support of Woodland Caribou Conservation and Recovery is limited to the area of continuous caribou distribution defined by MNRF, The Project footprint is located outside of the continuous distribution area.
		management strategies (i.e., Forest Management Planning documents, highway and/or road development plans).	



Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint
G2625	Rural Areas	 Management of this area is governed by: Crown Land Disposition Policy – Appendix A (2008); Inland Ontario Lakes Designated for Lake Trout Management (2006); Amendment to Area specific Crown Land Use Policy #2007-025 (2009). Update to Area-specific Land Use Policy to Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lakes. Thunder Bay District Land Use Guidelines (1983) Thunder Bay District Fisheries Management Plan (1986). Aggregate extraction permitted. Crown land dispositions may be permitted (except for agricultural, cottaging, urban/rural residential use and on designated trout lakes). Public road infrastructure (new and existing) is permitted taking into consideration alignment with existing management strategies (i.e., Forest Management Planning documents, highway and/or road development plans). A number of Project components overlap Class 1- 4 Agricultral lands, approval from OMARFA may be required. 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area. Aggregate extraction is permitted within the Project footprint. There are no restrictions for Crown Land Dispositions related to the Project footprint. New and existing access roads are permitted.
G2699	Shebandowan Lake	 Management of this area is governed by: Crown Land Disposition Policy – Appendix A (2008); Ignace District Land Use Guidelines (1983); Inland Ontario Lakes Designated for Lake Trout Management (2006); Amendment to Area-specific Crown Land Use Policy #2005-008 (2005). Amendment to Area specific Crown Land Use Policy #2007-025 (2009). Amendment to Area specific Crown Land Use Policy #2019- 008 (2019). Update to Area-specific Land Use Policy to 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area. Aggregate extraction is not permitted; however, there are no aggregate sites within the Project footprint that also overlap the Shebandowan Lake policy area. There are restrictions for Crown Land Dispositions related to the Project footprint. Additional consultation and/or



Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint
		Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lakes.	applications for Crown Land Amendments may be required.
		 Aggregate extraction is not permitted. 	 Access roads may be permitted;
		 Crown land dispositions are not permitted. 	however, there are restrictions within 300 m of Shebandowan Lake. Roads to
		 Public road infrastructure (new and existing) is permitted taking into consideration alignment with existing management strategies (i.e., Forest Management Planning documents, highway and/or road development plans). Roads with water crossings will be limited to areas where alternative access is not available. New roads with water crossings will be limited and preference will be given to road locations greater than 30 m from the lake. 	access private property for personal use are permitted and roads with water crossings will be limited to where alternative access is not available. New roads with water crossings should be limited. Preference will be given to road locations greater than 30 m from the lake.
		 Area of Concern: A 200 m no-cut applies for all lots 2 ha more in size at Mud Lake. 	
	Steep Rock	 Management of this area is governed by: Atikokan District Land Use Guidelines (1983) Atikokan District Fisheries Management Plan (1988) 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area. Aggregate extraction is permitted within
		Crossroule Forest Management Plan (2002)	the Project footprint.
G2567		 Aggregate extraction is permitted pending conformance with the Atikokan Official Plan, zoning by-laws, amendments and the Aggregate Resources Act. Use of aggregate reserves within the township is encouraged first. 	 There are no restrictions for Crown Land Dispositions related to the Project footprint. Crown Land Dispositions must align with the Town of Atikokan Official Plan and applicable by-laws.
		 Crown land dispositions are permitted. Deliver and the factor of the facto	 New and existing access roads are
		taking into consideration alignment with the Atikokan	permitted.
		Township Official Plan, zoning by-laws, and amendments. Guidelines for access roads and water crossings apply.	 The Project overlaps with the "Anticipated Area of Inundation" and defined "Hazard Lands" at the Steep
		 Area(s) of Concern: "Anticipated Area of Inundation" and defined "Hazard Lands" at the mine site. 	Rock Mine site.



Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint
G2620	Thunder Bay Urban Area	 Management of this area is governed by: Thunder Bay District Land Use Guidelines (1983) Aggregate extraction is permitted pending conformance with the City of Thunder Bay Official Plan and zoning bylaws. Use of aggregate reserves within the township is encouraged first. Crown land dispositions may be permitted (except for cottaging, urban/rural residential use and on designated trout lakes). Public road infrastructure (new and existing) is permitted taking into consideration alignment with the City of Thunder Bay Official Plan, zoning by-laws, and amendments. Guidelines for access roads and water crossings apply. 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area. Aggregate extraction is permitted within the Project footprint. There are no restrictions for Crown Land Dispositions related to the Project footprint. Crown Land Dispositions must align with the City of Thunder Bay Official Plan and applicable by-laws. New and existing access roads are permitted; however, must confirm with recreation and resource management activities, and local zoning by-laws.
G2566	Township of Atikokan	 Management of this area is governed by: Crown Land Disposition Policy – Appendix A (2008); Atikokan District Land Use Guidelines (1983); Amendment to Area-specific Crown Land Use Policy #2006-027 (2006). Lakeshore Development in the Township of Atikokan. Atikokan District Fisheries Management Plan (1988); Atikokan District Highway Plan (1985); Inland Ontario Lakes Designated for Lake Trout Management (2006); Amendment to Area specific Crown Land Use Policy #2007-025 (2009). Update to Area-specific Land Use Policy #2007-025 (2009). Update to Area-specific Land Use Policy to Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lakes; and Crossroute Forest Management Plan (2002). Aggregate extraction is permitted pending conformance with the Atikokan Official Plan, zoning by-laws, amendments and the Aggregate Resources Act. Crown land dispositions are permitted. 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area. Aggregate extraction is permitted within the Project footprint. There are no restrictions for Crown Land Dispositions related to the Project footprint. Crown Land Dispositions must align with the Town of Atikokan Official Plan and applicable by-laws. New and existing access roads are permitted. Highway development plans have been prepared for Highways 11 and 11B and the Bending Lake Highway (includes Highway 622). The Project footprint overlaps the AOC for Plateau Lake and the Atikokan River floodplain; however, does not overlap Lerome Lake, or Jackfish Lake.



Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint
		 Public road infrastructure (new and existing) is permitted taking into consideration alignment with existing management strategies (i.e., Forest Management Planning documents, highway and/or road development plans). 	
		 Area(s) of Concern: Atikokan River floodplain, 200 m no- cut area for cottaging lakes including Lerome. Jackfish and Plateau Lakes for all lots 2 ha or less. On all other lots a 200 metre modified management area applies around all development on an individual basis. 	
		 Management of this area is governed by: Atikokan District Land Use Guidelines (1983) Atikokan District Fisheries Management Plan (1988) 	 The Project footprint does not overlap any designated Lake Trout Lakes within this CLUPA policy area.
	Townsite Atikokan	 Aggregate extraction is permitted pending conformance with the Atikokan Official Plan, zoning by-laws 	 Aggregate extraction is permitted within the Project footprint.
		amendments and the Aggregate Resources Act.	There are no restrictions for Crown Land Dispositions related to the Project
G2565		 Crown land dispositions are permitted (except for cottaging, urban/rural residential use and on designated trout lakes). 	footprint. Crown Land Dispositions must align with the Town of Atikokan Official Plan and applicable by-laws.
		 Public road infrastructure (new and existing) is permitted taking into consideration alignment with existing management strategies (i.e., Forget Management) 	 New and existing access roads are permitted.
		Planning documents, highway and/or road development plans).	 The Project footprint overlaps the AOC for the Atikokan River floodplain.
		 Area(s) of Concern: Atikokan River floodplain. 	
Provincial Parks			
P2588	Quetico Provincial Park (Wilderness Class)	 See Section 7.1.7.1 and Table 7.1-4 for additional information on land use planning and regulatory information on parks and protected areas. 	 See Section 7.1.7.1 and Table 7.1-4 for additional information on land use planning and regulatory information on parks and protected areas.



Policy Number	Name of CLUPA Policy Area	CLUPA Policy Report Details and Restrictions	Applicable Policy Report Details and Restrictions in the Project Footprint
P2304e	Turtle River- White Otter Lake Provincial Park (Waterway Class)	 See Section 7.1.7.1 and Table 7.1-4 for additional information on land use planning and regulatory information on parks and protected areas. 	 See Section 7.1.7.1 and Table 7.1-4 for additional information on land use planning and regulatory information on parks and protected areas.
Conservation Reserve			
C2299	Campus Lake Conservation Reserve	 See Section 7.1.7.1 and Table 7.1-4 for additional information on land use planning and regulatory information on parks and protected areas. 	 See Section 7.1.7.1 and Table 7.1-4 for additional information on land use planning and regulatory information on parks and protected areas.
Enhanced Management Area			
E2414a	White Otter Enhanced Management Area	 See Section 7.1.7.1 and Table 7.1-4 for additional information on land use planning and regulatory information on parks and protected areas. 	 See Section 7.1.7.1 and Table 7.1-4 for additional information on land use planning and regulatory information on parks and protected areas.

Source: (MNRF 2023a)

= number; CLUPA = Crown Land Use Policy Atlas; ha = hectare; m = metre; ROW = right-of-way.





Crown Land Dispositions

The definition of Crown Dispositions is the transfer of rights to use Crown land from the Crown to private individuals, businesses, other ministries, or the federal government. Non-Freehold Dispositions include leases, licences of occupations easements, beach management agreements, and land use permits. At the end of the term of the occupation, the land reverts back to the Crown if the occupation agreement is not renewed, or the terms of the agreement are not met. Unpatented Crown Land includes lands under the Crown managed by the MNRF that have not been granted or sold by the Crown to people or organizations for private use. Patented properties that are forfeited back to the Crown and depatented lands are also included under the definition of Unpatented Crown lands (MNRF 2016).

Additionally, unpatented and Non-Freehold Disposition Crown Lands in the Project footprint, LSA, and RSA include the following:

- Within the Project footprint there is 7.1 ha designated as Crown Disposition Easement, 9.9 ha designated as Crown Disposition Land Use Permit, 0.5 ha of land designated as Crown Disposition Leases, 1.0 ha designated as Crown Disposition Licence of Occupation, and 3,845.5 ha designated as Unpatented Crown Land.
- Within the LSA there is 369.4 ha designated as Crown Disposition Easement, 431.1 ha designated as Crown Disposition Land Use Permit, 2,619.0 ha of land designated as Crown Disposition Leases, 111.1 ha designated as Crown Disposition Licence of Occupation, and 352,174.1 ha designated as Unpatented Crown Land.
- Within the RSA there is 430.0 ha designated as Crown Disposition Easement, 475.8 ha designated as Crown Disposition Land Use Permit, 7,870.9 ha of land designated as Crown Disposition Leases, 868.4 ha designated as Crown Disposition Licence of Occupation, and 638,293.5 ha designated as Unpatented Crown Land.

Details (i.e., provisions related to permitted use and area of lands) related to the occurrence of Non-Freehold Disposition Crown Lands in the Project footprint, LSA, and RSA have been set out in Table 7.1-9.



Crown Lands Subtype	Frequency in the Project Footprint	Area in the Project Footprint (ha)	Frequency in the LSA	Area in the LSA (ha)	Frequency in the RSA	Area in the RSA (ha)
Crown Disposition Easement	33	7.1	210	369.4	245	430.0
Crown Disposition Land Use Permit	17	9.9	122	431.2	167	475.8
Crown Disposition Leases	4	0.5	86	2,619.0	253	7,870.9
Crown Disposition Licence of Occupation	1	1.0	28	111.1	100	868.4
Unpatented Crown Land	228	3,845.5	1,039	352,174.1	1,547	638,293.5

 Table 7.1-9:
 Non-Freehold Disposition and Unpatented Crown Lands in the Study Areas

Source: (MNRF 2022h)

ha = hectares; LSA = Local Study Area; RSA = Regional Study Area.





7.1.7.2.3 Municipal Land Use Policies and Designations

7.1.7.2.3.1 Zoning and Local Planning Policies

Regional land use plans build upon the policy foundation provided by the PPS, establishing land use planning policies to address issues, objectives, and challenges of specific regions of Ontario. The Province of Ontario's land and resource management objectives are provided in the Growth Plan for Northern Ontario, approved in 2011 under the *Places to Grow Act, 2005*, which allows the province to identify and develop strategic regional growth plans in a manner that supports economic prosperity and high quality of life in these regions (MMAH 2011; *Places to Grow Act, 2005*).

The Growth Plan for Northern Ontario, 2011, includes several policy references to goals and objectives for increased infrastructure capacity and development (including transmission infrastructure) in northern Ontario, specifying the need for increased infrastructure capacity in northern Ontario, and accompanying investment strategies into transmission and distribution systems (MMAH 2011).

Based on the municipal policies outlined in Table 7.1-11, utility infrastructure is permitted in the City of Dryden, City of Thunder Bay, Municipality of Oliver Paipoonge, Municipality of Shuniah, Town of Atikokan, Township of Conmee, and Township of Ignace, provided that appropriate planning, permitting, and consultation takes place. Utility infrastructure in the noted settlement areas should comply with local/municipal planning policies and objectives, the *Planning Act*, the PPS (1990), and the CLUPA.

The Town of Atikokan (222.1 ha), Municipality of Shuniah (128.0 ha), and the City of Dryden (83.3 ha) have the largest areas intersected by Project footprint.

The City of Thunder Bay (38.2 ha) and the Township of Ignace (18.4 ha) are also intersected by the Project footprint, but considerably less so.

The Municipality of Oliver Paipoonge is intersected by 0.4 ha, and the Township of Conmee is not intersected at all.

Table 7.1-10 provides a breakdown of municipal land areas (ha) that are located in the Project footprint, LSA and RSA.

Table 7.1-11 provides information regarding each municipality's Official Plan policies pertaining to transmission lines and utility corridors.



Municipality	Area in Project Footprint (ha)	Area in LSA (ha)	Area in RSA (ha)
City of Dryden	85.3	6,693.4	6,705.8
City of Thunder Bay	38.2	13,207.52	21,992.0
Municipality of Oliver Paipoonge	0.4	4,240.0	9,880.3
Municipality of Shuniah	128.0	11,706.1	24,687.8
Town of Atikokan	222.0	21,783.2	33,125.4
Township of Conmee	n/a	2,814.4	8,329.8
Township of Ignace	18.4	5,976.4	9,289.9

 Table 7.1-10:
 Municipal Boundaries for Settlements in the Study Areas

Source: (City of Dryden 2022a; City of Thunder Bay 2022; Municipality of Oliver Paipoonge 2022; Municipality of Shuniah 2022; Town of Atikokan 2022; Township of Conmee 2022; Township of Ignace 2022).

Note: Some numbers are rounded for presentation purposes.

Ha = hectare; n/a = not applicable; LSA=Local Study Area; RSA = Regional Study Area





Municipality	Planning Document	Provisions Regarding Transmission Lines and Utility Corridors	Allowance of Utility Infrastructure
City of Dryden	City of Dryden's Official Plan (2013) (City of Dryden, 2023)	 Section 2.6 – Basics The City of Dryden has developed as a centre for commercial and institutional growth in northwestern Ontario and is located along the Trans-Canada Highway. Planning and infrastructure considerations must take into account route planning and changes the MTO may make to the Trans-Canada Highway. 	 Yes, with appropriate planning and permitting.
		 Section 3.3.2 - Culture Planning must take into consideration the following: Encourage the conservation and enhancement of cultural heritage resources, significant archaeological and historic resources and significant landscapes; Recognize and support of the diverse ethnic groups, ages, and interests of the present and future residents; Support the cultural community and support local artisans, through the installation of public art and creation of public spaces; Consult with Indigenous communities when considering significant land uses or public works; Build a physically attractive and accessible community that enhances quality of place; and Ensure that planning for land use, infrastructure and other municipal or community services considers culture in the consultation and decision-making process. 	
		 Section 5.10 – Land Use Compatibility Land use conflicts should be avoided including the encroachment of sensitive land uses and major facilities on one another. 	

Table 7.1-11:	Official Plan Policies Related to the Project Footprin	ht
	Official Flatt Folicies Related to the Floject Foliphin	10



Municipality	Planning Document	Provisions Regarding Transmission Lines and Utility Corridors	Allowance of Utility Infrastructure
		 Where planning approvals are required to accommodate the establishment or expansion of major facilities or sensitive land uses, proposals will be reviewed in accordance with MECP Guidelines. 	
		• Where proposed developments may result in potential compatibility concerns, proponents may be required to provide supporting technical studies to assist in the evaluation of proposed developments and determine influence areas, address impacts and identify appropriate separation distances/mitigation measures.	
		 If the impacts cannot be minimized to acceptable levels the proposed development shall not proceed. 	







Municipality	Planning Document	Provisions Regarding Transmission Lines and Utility Corridors	Allowance of Utility Infrastructure
City of Thunder Bay	Official Plan (2022) (City of Thunder Bay, 2023)	 Utilities Any utility or service uses not specifically designated as Utility on Schedule A shall be regarded as complementary uses to other land use designations. To enhance the compatibility of uses within the Utilities designation with surrounding land uses, appropriate setback requirements, on-site berming, fencing or other landscaping features or other mitigative measures shall be considered. 	 Yes, with appropriate planning and permitting.
		 Provision and Extension of Utilities and Services The City shall allow for the provision and extension of electricity generation facilities and transmission and distribution systems, gas, oil, and telecommunications infrastructure to serve the current and future needs of the City. 	
		 Utilities and services will be provided in consultation and co-ordination with the responsible regulatory agencies and any public and private service providers. 	
		 Any adverse impact these services may have on existing development or the natural environment shall be avoided, minimized, or mitigated, as confirmed through an Environmental assessment process, as applicable. 	
		 Extensions shall proceed as development occurs in a manner and location as determined by the respective service provider. 	





Municipality	Planning Document	Provisions Regarding Transmission Lines and Utility Corridors	Allowance of Utility Infrastructure
City of Thunder Bay (continued)	Official Plan (2022) (City of Thunder Bay, 2019)	 Utility Corridors and Rights-of-Way Utility infrastructure, including electricity generation facilities, electricity transmission and distribution systems, pipelines, telecommunications, and public service facilities, shall be protected by means of a right of-way or easement satisfactory to the City and where feasible, the shared or multiple use of transmission towers, poles, hydro corridors, and major road rights-of ways shall be encouraged (City of Thunder Bay 2019). 	 Yes, with appropriate planning and permitting.
		Installation of Poles, Lines, and Plants	
		• Utility poles, structures, lines, plants, and electricity generation facilities and transmission and distribution systems required to serve the public shall be installed in an efficient, coordinated, and economical manner with minimal disruption to existing development.	
		Underground Servicing	
		• Where feasible, utility and distribution lines are to be installed underground within the Urban Settlement Area to minimize their adverse visual impacts, and to minimize damage and service interruptions due to extreme weather events, which are expected to increase in frequency with a changing climate.	
		Engineering Development Standards, and Parks and Open Spaces Standards and Specifications	
		 New development, redevelopment, or additions shall fall in accordance with the City's Engineering Development Standards, and Parks and Open Spaces Standards and Specifications as well as federal and provincial regulations, as may be amended from time to time. 	



Municipality	Planning Document	Provisions Regarding Transmission Lines and Utility Corridors	Allowance of Utility Infrastructure
Municipality of Oliver Paipoonge	Official Plan (2018) (Municipality of Oliver Paipoonge, 2023)	 Section 2.1.4 Planning should promote patterns of development that facilitate the provision of local services with minimal or no impact on local finances and provide for the efficient use of land, infrastructure, and public service facilities. 	 Yes, with appropriate planning and permitting.
		Section 3.11	
		• The council shall encourage local utility companies to place equipment and devices in locations that do not detract from the visual character of cultural heritage resources and that do not have a negative impact on the architectural integrity of those resources.	
		Section 4.9.3	
		 Development shall not be permitted on Environmental Protection lands for the following uses: a) Residential, commercial, and industrial uses; b) Institutional uses; c) An essential emergency service/facility for fire, police, ambulance, stations or electrical substations; and d) Any use associated with the disposal, manufacture, treatment, or storage of hazardous materials. 	
Municipality of	Shuniah Official	Planning Objectives	 Yes, with appropriate
Shuniah	Plan (2021) (Municipality of Shuniah, 2021)	 Planning should prevent and adapt to climate change and prevent other economic and health impacts by optimizing the use of existing infrastructure and public services; evaluate the need for future infrastructure; promote orderly, economic, efficient, and effective creation/delivery of common infrastructure, public services, and public service facilities; and promote 	planning and permitting.



Municipality	Planning Document	Provisions Regarding Transmission Lines and Utility Corridors	Allowance of Utility Infrastructure
		cost effective development standards to minimize land consumption and servicing costs.	
		Land Use Designations	
		 A variety of land-uses or activities are considered to be compatible and consistent with the intent of all land use designations; and are permitted in all designations subject to zoning and/or other implementation strategies. These include: Roads, pathways, lanes; Parks, open spaces, land use conservation; Essential operation of municipal government relating to the delivery of public services; Gas, telephone, electrical delivery systems and directly related infrastructure; Slope stability and remedial flood protection; Fish, wildlife, waterfowl habitat protection; Landscaping, fencing, and natural vegetation; and, 	
Town of	Official Plan for the	Community gardens and/or market gardens. Section 3 13 3	• Vee with enprepriete
Atikokan	Township of Atikokan (2002) (Town of Atikokan,	 New utilities/facilities should be located outside of the sensitive area. 	 Yes, with appropriate planning and permitting.
	2023)	Section 3.15.4	
		• Works shall not be permitted that result in the degradation of the quality and integrity of an ecosystem below acceptable standards, including air, water, land and plant and animal life. Where the quality and integrity of an ecosystem has been diminished, restoration/remediation is required.	



Municipality	Planning Document	Provisions Regarding Transmission Lines and Utility Corridors	Allowance of Utility Infrastructure
		Section 3.16.1	
		• Works shall not be permitted that result in the degradation of the quality and integrity of an ecosystem air, water, land and plant and animal life. Where the quality and integrity of an ecosystem has been diminished, restoration/remediation is required.	
		Section 3.26	
		• Public works undertaken shall conform to the policies of this Plan, in accordance with Section 24 of the <i>Planning Act</i> and shall be planned and implemented in accordance with the applicable Class environmental assessment under the <i>Environmental Assessment Act</i> .	
		Section 3.27.1	
		• Public utilities have the right to maintain, repair, and service their facilities over private property. In certain instances, these utility corridors are not recognized by formal access agreements registered on title. Efforts will be made by the various public utility companies to secure the appropriate access agreements and legal documentation.	
		Section 3.27.2	
		 Access/rights-of-way for utility corridors will be granted through conditions of approval for such matters as consents, amendments to the Official Plan and Zoning By-law, site plan approval or minor variance approval. 	





Municipality	Planning	Provisions Regarding Transmission Lines	Allowance of Utility
	Document	and Utility Corridors	Infrastructure
Township of Ignace	Final Official Plan (2020) (Township of Ignance 2020)	 Section 3.12 Public utilities, including electricity generation facilities, transmission, and distribution systems, shall be permitted in all land use designations without the need for an Official Plan amendment. Section 9.14.4 Works including the following shall be exempted from the Site Plan Control By-law in order to avoid undue restrictions: a) Single-detached dwellings and any other class of dwelling to a maximum of four dwelling units; b) Utility installations; c) Public utilities; and d) Agricultural uses. 	 Yes, with appropriate planning and permitting.

Source: (City of Dryden 2023; City of Thunder Bay 2019; Municipality of Oliver Paipoonge 2023; Municipality of Shuniah 2021; Town of Atikokan 2002; and Township of Ignace 2020).







Table 7.1-12 through Table 7.1-18 and Figure 7.1-3 summarize the municipal zoning classifications of the municipal lands in the Project footprint, LSA, and RSA. Each is described below.

The City of Dryden

The City of Dryden is approximately 6,705.8 ha in size, and 83.3 ha (1.2%) of the City is located in the Project footprint. A review of the land use types which overlap the Project footprint was completed in order to confirm that presence of utility infrastructure conformed with the City of Dryden Official Plan (2023) (Table 7.1-11). The Rural (RU) land designation makes up the majority of land overlapping the Project footprint within the City of Dryden (64.1 ha). Permitted uses which may occur throughout lands zoned as RU include farms, accessory farm dwellings, farm produce sales outlets, greenhouse operations, homes/residences used for occupation or industry purposes, hunt camps, kennels, mining exploration activities, portable saw mills, resource management activities, riding schools or boarding stables, single detached dwellings, veterinary hospitals, and wayside pit or quarries.

The review also found that that certain types of developments will be exempted from the Site Plan Control By-law (including public utilities). The Site Plan Control By-Law (Chapter 216 – Site Control Plan) notes that the City of Dryden's planning administrator and the chief building official have authority under Section 41 of the *Planning Act*, R.S.O. 1990, c. P.13, to approve plans and drawings (including those related to public utilities) (City of Dryden 2023).

- 13.4 ha of extractive industrial lands overlap the Project footprint. Most of this area is crossed by existing access roads where no improvements are required. New activities within extractive industrial lands related to utilities may be permitted taking into consideration that activities do not adversely affect the viability of the extractive industry in the future (City of Dryden 2023).
- 0.2 ha of hazard lands overlap the Project footprint along existing access roads where no improvements are required.
- Under <0.1 ha of Highway Commercial lands overlap the Project Footprint along existing access roads where no improvements are required.
- 0.3 ha of industrial lands overlap the Project footprint. Site alteration within industrial lands related to utilities may be subject to the Site Plan Control By-Law and approval by the city's planning administrator and chief building official under the *Planning Act* and PPS 2020 (City of Dryden 2023).



- 0.5 ha of open space lands overlap the Project footprint. Most of this area is crossed by existing access roads where no improvements are required. Site alteration within open space lands should complement the natural area and ensure the protection the City of Dryden trail systems. Site alteration may be subject to the Site Plan Control By-Law and approval by the city's planning administrator and chief building official under the *Planning Act* and PPS 2020 (City of Dryden 2023).
- 64.1 ha of rural lands overlap the Project footprint, of which 18.2 ha are areas crossed by existing access roads with no improvements. The Project footprint also crosses 6.2 ha of rural residential lands, most of which are areas crossed by existing access roads where no improvements are required. Activities resulting in site alteration should preserve the rural character and scenic quality of the rural landscape. Site alteration within rural land use classifications may be subject to the Site Plan Control By-Law and approval by the city's planning administrator and chief building official under the *Planning Act* and PPS 2020 (City of Dryden 2023).
- Under <0.1 ha of shoreline residential lands overlap the Project footprint along existing access roads where no improvements are required.
- 0.6 ha of waste disposal industrial lands overlap the Project footprint along an existing access road where no improvements are required. The proposed ROW is located approximately 90 m north of this area. The City of Dryden Official Plan (City of Dryden 2023) notes that site alteration within 500 m of known waste sites shall require the submission of technical studies, to the satisfaction of Council, to establish the potential hazards, adverse effects, or health and safety risks that may result from these facilities. The required technical studies shall also provide recommendations regarding the appropriate mitigation measures, including setbacks, development standards, monitoring requirements, or other remedial measures to prevent adverse effects and minimize risk to public health and safety.

The City of Thunder Bay

The City of Thunder Bay is approximately 46,657.6 ha in size, and 38.2 ha (<0.1%) of the city is in the Project footprint. A review of the land use types which overlap the Project footprint was completed in order to confirm that presence of utility infrastructure conformed with the City of Thunder Bay Official Plan (2019) (Table 7.1-11). The Rural Area Zone land designation makes up the majority of land overlapping the Project footprint within the City of Thunder Bay (34.2 ha). Permitted uses which may occur throughout lands zoned as Rural Area Zone include agricultural activities, detached homes, rural pet services, bed and breakfasts, home day cares, large and small personal farms, outdoor storage areas and outdoor furnaces.

The official plan notes that the City shall allow for the provision and extension of electricity generation facilities and transmission and distribution systems, and gas, oil, and telecommunications infrastructure to serve the current and future needs of the city. Utilities and



services will be provided in consultation and co-ordination with the responsible regulatory agencies and any public and private service providers (City of Thunder Bay 2019).

- 2.6 ha of environmental protection zone lands overlap the Project footprint, most of which are areas crossed by existing access roads where no improvements are required. The 20 m wide footprint for one existing access road with potential improvements crosses this area for <1.0 ha. However, the centre of this road is located a few metres north of the northern limit of the City of Thunder Bay zoning data, and due to the resolution of the data available, the road may not cross the environmental protection zone.
- 0.1 ha of neighbourhood centre open space lands overlap the Project footprint along an existing access road where no improvements are required.
- 0.4 ha of open space zone lands overlap the Project footprint.
- 35.0 ha of rural lands (rural area zone and rural residential zone) overlap the Project footprint, most of which are areas crossed by existing access roads where no improvements are required. Site alteration for the purposes of new municipal services shall be subject to the *Planning Act* and PPS 2020 (City of Thunder Bay 2019).

The Municipality of Oliver Paipoonge

The Municipality of Oliver Paipoonge is approximately 35,625.7 ha in size, and 0.4 ha (<0.1%) of the municipality is in the Project footprint (Table 7.1-11). The lands in the Project footprint are zoned Rural Residential (0.4 ha) (Municipality of Oliver Paipoonge 2023) and are crossed by existing access roads where no improvements are required. Permitted uses which may occur throughout lands zoned as Rural Residential include single detached dwellings, accessory dwellings, and homes used for occupational/industry purposes.

The Municipality of Shuniah

The Municipality of Shuniah is approximately 89,119.9 ha in size, and 127.4 (0.1%) ha of the municipality is in the Project footprint. A review of the land use types which overlap the Project footprint was completed in order to confirm that presence of utility infrastructure conformed with the Municipality of Shuniah Official Plan (2021) (Table 7.1-11). The Rural land designation makes up the majority of land overlapping the Project footprint within the Municipality of Shuniah (100.8 ha). Permitted uses which may occur throughout lands zoned as Rural include home occupations, additional residential units, garden suits, private individual energy facilities, agricultural activities (and related activities), aggregate exploration and extraction, mineral exploration and extraction, portable asphalt plants, alternative energy, cemeteries, kennels, and existing remote cottage uses.

- 6.1 ha of aggregate extraction lands overlap the Project footprint.
- 0.5 ha of aggregate extraction/processing lands overlap the Project footprint.



- 3.1 ha of community residential lands overlap the Project footprint, most of which are areas crossed by existing access roads where no improvements are required.
- 8.9 ha of heavy industrial lands overlap the Project footprint.
- 0.4 ha of highway commercial lands overlap the Project footprint along existing access roads where no improvements are required.
- 6.6 ha of light industrial lands overlap the Project footprint along existing access roads where no improvements are required.
- 0.8 ha of mobile home residential lands overlap the Project footprint along existing access roads where no improvements are required.
- 0.2 recreational commercial lands overlap the Project footprint.
- 100.8 ha of rural lands overlap the Project footprint.

Gas, telephone, electrical delivery systems, and directly related infrastructure are considered to be compatible and consistent with the intent of all land use designations. Site alteration may also be subject to the *Planning Act* and PPS 2020 (Municipality of Shuniah 2021).

The Town of Atikokan

The Town of Atikokan is approximately 36,840.3 ha in size, and 222.0 ha (0.6%) of the town is in the Project footprint. A review of the land use types which overlap the Project footprint was completed in order to confirm that presence of utility infrastructure conformed with the Town of Atikokan Official Plan (2002) (Table 7.1-11). The Resource Development Zone land designation makes up the majority of land overlapping the Project footprint within the Town of Atikokan (217.7 ha). Permitted uses which may occur throughout lands zoned as Resource Development Zone include airports and seaplane bases, agricultural activities, existing extractive activities (i.e., mineral, aggregate, peat), animal care and shelter facilities, conservation and wildlife management, commercial and industry activities (i.e., fish farms, forestry, tourism, waste disposal, water treatment, power generation) and homes (i.e., mobile, single-dwelling, seasonal).

The Town of Atikokan Official Plan notes that easements and ROWs for utility corridors will be granted through conditions of approval for such matters as consents, amendments to the Official Plan and Zoning By-law, site plan approval or minor variance approval (Town of Atikokan 2002).

 1.6 ha of environmental protection zone lands overlap the Project footprint, most of which are areas crossed by existing access roads where no improvements are required. The Town of Atikokan Official Plan (2020) notes that utility infrastructure is permitted within environmental protection zones (Town of Atikokan 2002).



- 0.3 ha of highway commercial zone (special provisions) lands overlap the Project footprint along existing access roads where no improvements are required.
- 0.1 ha of industrial zone lands overlap the Project footprint, most of which are areas crossed by existing access roads where no improvements are required. Planning may be subject to the Site Plan Control By-Law and approval by the town council under the Planning Act and PPS 2020 (Town of Atikokan 2002).
- 0.3 ha of institutional zone lands overlap the Project footprint along existing access roads where no improvements are required.
- 0.5 ha of mobile home residential zone lands overlap the Project footprint along existing access roads where no improvements are required.
- 1.5 ha of open space zone lands overlap the Project footprint along existing access roads where no improvements are required.
- 217.7 ha of resource development zone lands overlap the Project footprint. The Town of Atikokan Official Plan (2020) notes that utility infrastructure is permitted within resource development zones (Town of Atikokan 2002).

The Township of Conmee

The Township of Conmee is approximately 17,099.4 ha in size. There are no lands in the Township of Conmee crossed by the Project footprint (Table 7.1-11).

The Township of Ignace

The Township of Ignace is approximately 9,306.5 ha in size, and 18.4 ha (0.2%) of the town is in the Project footprint. The lands in the Project footprint are zoned Airport Zone (1.4 ha), and Rural Zone (17.0 ha) (Township of Ignace 2020) (Table 7.1-11) and are crossed by existing access roads where no improvements are required. Permitted uses which may occur within areas designated as Rural Zone include agricultural activities and accessory uses, animal care and shelter facilities, cemeteries, communication facilities, forestry, gold courses, greenhouses, home occupations/industry, extractive activities (i.e., mineral, aggregate),

municipal/district/provincial maintenance or storage yards, outdoor recreational areas or structures, asphalt or concrete plants, designated resource management areas, riding schools or stables, saw or planning mills, utility installation, and wayside pits/quarries.

Rural or Unincorporated Lands

Data limitations exist for rural and unincorporated/unorganized areas located throughout the Project footprint, LSA, and RSA. At the time of reporting, for the spatial boundaries for these areas were not available. An outline of the responsibilities of rural townships, local service boards (the *Northern Services Board Act*), and the province (the Growth Plan for Northern Ontario, MNRF responsibilities for Crown land [i.e., CLUPA], *Planning Act*, and PPS 2020) is discussed in Section 7.1.7.2.2 (Provincial and Regional Land Use Policies and Designations).



The Unincorporated or Rural Lands crossed by the Project footprint and by the LSA are shown in Table 7.1-19. Information outlined within the PPS 2020 notes that on rural lands located in municipalities, permitted uses include the management or use of resources, resource-based recreational uses (including recreational dwellings), residential development (including locally appropriate lot creation), agricultural uses, agricultural-related uses, on-farm diversified uses and normal farm practices (in accordance with provincial standards), home occupations and home industries, cemeteries, and other rural land uses.













25mm IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEE



25mm IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET S


APPROVED

CS

PROJECT NO. CONTROL REV. FIGURE 20137728 0030 7.1.3-4 1



Municipal Zoning Classification	Area (ha) of the Zone in the Project Footprint	Area (ha) of the Zone in the Project Footprint Excluding Existing Access Roads with No Improvements	Area (ha) of the Zone in the LSA	Area (ha) of the Zone in the RSA
Downtown Comm. (CD)	0	0	24.6	24.6
Extractive Ind. (MX)	13.4	12.9	202.4	202.4
General Comm. (CG)	0	0	3.5	3.5
Hazard Land (HZ)	0.2	0	246.0	246.5
Heavy Ind. (M2)	0	0	26.8	26.8
Highway Comm – Holding (CH-H)	0	0	16.0	16.0
Highway Comm. (CH)	<0.1	0	147.4	147.4
Institutional (I)	0	0	37.6	37.6
Institutional (I) and Res. Multiple	<0.1	0	3.1	3.1
Light Ind. – Holding (M1- H1)	0	0	61.5	61.5
Light Ind. (M1)	0.3	0	138.2	138.2
Local Comm. (CL)	<0.1	0	2.8	2.8
Mill Ind. (MM)	0	0	158.4	158.4
Open Space – (OS)	0.5	0	311.0	311.0
Open Space – Site Specific (OS-1)	0	0	1.4	1.4
Res. Mobile Home (RMH)	0	0	11.9	11.9

 Table 7.1-12:
 Municipal Land Use Zoning in the Study Areas for the City of Dryden



Municipal Zoning Classification	Area (ha) of the Zone in the Project Footprint	Area (ha) of the Zone in the Project Footprint Excluding Existing Access Roads with No Improvements	Area (ha) of the Zone in the LSA	Area (ha) of the Zone in the RSA
Res. Modular Dwelling (RMD)	0	0	21.5	21.5
Res. Multiple (RM)	0	0	17.3	17.3
Res. Type 1 – Holding (R1- H)	0	0	26.2	26.2
Res. Type 1 (R1)	0	0	230.8	230.8
Res. Type 2 (R2)	0	0	70.8	70.8
Rural – Holding (RU-H)	0	0	72.5	72.5
Rural (RU)	64.1	45.9	4,081.4	4,084.8
Rural Res. (RR)	6.2	<0.1	352.6	352.6
Shoreline Res. (RS)	<0.1	0	273.1	273.7
Tourist Comm. – Holding (CT-H)	0	0	11.7	11.7
Tourist Comm. (CT)	0	0	28.0	28.5
Waste Disposal Ind. (MD)	0.6	0	6.3	6.3

Source: (City of Dryden 2022a).

Note: Some numbers are rounded for presentation purposes.





Municipal Zoning Classification	Area (ha) of the Zone in the Project Footprint	Area (ha) of the Zone in the Project Footprint Excluding Existing Access Roads with No Improvements	Area (ha) of the Zone in the LSA	Area (ha) of the Zone in the RSA
Arterial Commercial Zone	0	0	15.6	87.2
Central Business District Zone	0	0	0	55.7
Environmental Protection Zone	2.6	0.2	1,165.4	1,904.6
Extractive Industrial Zone	0	0	106.8	220.1
Future Development Zone	0	0	0	14.0
Heavy Industrial Zone	0	0	343.1	766.3
Highway Commercial Zone	0	0	16.1	16.1
Light Industrial Zone	0	0	0	58.0
Major Institutional Zone	0	0	38.6	298.8
Medium Industrial Zone	0	0	188.6	313.0
Mixed Use Zone 1	0	0	19.5	25.7
Mixed Use Zone 2	0	0	76.7	133.7
Mixed Use Zone 3	0	0	12.3	19.4
Neighbourhood Centre One Zone	0.1	0	31.0	32.8
Neighbourhood Centre Three Zone	0	0	69.9	121.7
Neighbourhood Centre Two Zone	0	0	28.4	40.8

Table 7.1-13:	Municipal Land Use Zoning	g in the Stud	y Areas for the Cit	y of Thunder Bay
---------------	---------------------------	---------------	---------------------	------------------



Municipal Zoning Classification	Area (ha) of the Zone in the Project Footprint	Area (ha) of the Zone in the Project Footprint Excluding Existing Access Roads with No Improvements	Area (ha) of the Zone in the LSA	Area (ha) of the Zone in the RSA
Open Space Zone	0.4	0	1,233.7	1,670.3
Prestige Industrial Zone	0	0	0	31.3
Residential Future Zone	0	0	134.4	25.0
Regional Commercial Centre Zone	0	0	0	0.9
Residential Future Zone	0	0	0	239.1
Residential Zone 1	0	0	189.7	438.3
Residential Zone 2	0	0	344.3	586.4
Residential Zone 3	0	0	319.2	589.2
Rural Area Zone	34.2	0.4	7,391.2	9,456.0
Rural Residential Zone	0.8	0	1,161.0	2,237.5
Urban Centre Zone	0	0	28.0	50.5
Utilities and Services Zone	0	0	52.3	18.2
Utilities and Services Zone	0	0	0	525.9
Waterfront Zone	0	0	0	1.4

Source: (City of Thunder Bay 2022).

Note: Some numbers are rounded for presentation purposes.





Municipal Zoning Classification	Area (ha) of the Zone in the Project Footprint	Area (ha) of the Zone in the Project Footprint Excluding Existing Access Roads with No Improvements	Area (ha) of the Zone in the LSA	Area (ha) of the Zone in the RSA
Disposal Industrial	0	0	53.1	53.1
General Agriculture	0	0	172.5	172.5
Institutional	0	0	1.6	1.6
Low Density Residential	0	0	28.8	28.8
Neighbourhood Commercial	0	0	8.5	8.5
Open Space	0	0	1.6	1.6
Rural	0	0	768.0	768.0
Rural Residential	0.4	0	654.1	1,056.3

Table 7.1-14:	Municipal Land Use	Zoning in the Study A	Areas for the Municipality	y of Oliver Paipoonge
---------------	--------------------	-----------------------	----------------------------	-----------------------

Source: (Municipality of Oliver Paipoonge 2022).

Note: Some numbers are rounded for presentation purposes.





Municipal Zoning Classification	Area (ha) of the Zone in the Project Footprint	Area (ha) of the Zone in the Project Footprint Excluding Existing Access Roads with No Improvements	Area (ha) of the Zone in the LSA	Area (ha) of the Zone in the RSA
Aggregate Extraction	6.1	5.4	241.3	241.3
Aggregate Extraction/Processing	0.5	0.5	186.3	186.3
Community Commercial	0	0	4.3	4.3
Community Residential	3.1	0.5	429.2	429.2
Heavy Industrial	8.9	6.4	85.0	85.0
Highway Commercial	0.4	0	28.1	28.1
Light Industrial	6.6	0	348.8	348.8
Mobile Home Residential	0.8	0	12.9	12.9
Open Space	0	0	27.3	27.3
Recreational – Association	0	0	142.1	142.1
Recreational – White Birch	0	0	0.4	0.4
Recreational Commercial	0.2	0.2	97.9	97.9
Rural	100.8	69.4	6,536.8	7,800.3
Shoreline Residential	0	0	9.6	9.6

Table 7 1 15:	Municipal Land Llas Zonin	a in the Study Area	, for the Municipali	ty of Shuniah
Table 7.1-15.	wumunupai Lanu Use Zumi	iy ili the Study Aleas	s for the municipal	ty of Shuman

Source: (Municipality of Shuniah 2022).

Note: Some numbers are rounded for presentation purposes.





Municipal Zoning Classification	Area (ha) of the Zone in the Project Footprint	Area (ha) of the Zone in the Project Footprint Excluding Existing Access Roads with No Improvements	Area (ha) of the Zone in the LSA	Area (ha) of the Zone in the RSA
Environmental Protection Zone	1.6	0.5	667.1	1,028.0
General Commercial Zone	0	0	14.9	14.9
Highway Commercial Zone (Special Provisions)	0.3	0	28.8	28.8
Industrial Zone	0.1	<0.1	89.2	89.2
Industrial Zone (Holding)	0	0	18.2	18.2
Institutional Zone	0.3	0	34.3	34.3
Mobile Home Residential Zone	0.5	0	160.1	160.1
Multiple Residential Zone	<0.1	0	17.3	17.3
Multiple Residential Zone (Holding)	0	0	57.3	57.3
Neighbourhood Commercial Zone	0	0	1.4	1.4
Open Space Zone	1.5	0	78.4	78.4
Residential 1 Zone	0	0	8.9	8.9
Residential 1 Zone (Holding)	0	0	3.6	3.6

Table 7.1-16:	Municipal I and Use Zonin	g in the Study Areas	for the Town of Atikokan
	Municipal Land 036 Zonni	g in the oldury Aleas	







Municipal Zoning Classification	Area (ha) of the Zone in the Project Footprint	Area (ha) of the Zone in the Project Footprint Excluding Existing Access Roads with No Improvements	Area (ha) of the Zone in the LSA	Area (ha) of the Zone in the RSA
Resource Development Zone	222.0	192.6	20,640.1	31,521.3

Source: (Town of Atikokan 2022).

Note: Some numbers are rounded for presentation purposes.

Ha = hectares; LSA = Local Study Area; RSA = Regional Study Area; n/a = not applicable.

Table 7.1-17: Municipal Land Use Zoning in the Study Areas for the Township of Conmee

Municipal Zoning Classification	Area (ha) of the Zone in the Project Footprint	Area (ha) of the Zone in the Project Footprint Excluding Existing Access Roads with No Improvements	Area (ha) of the Zone in the LSA	Area (ha) of the Zone in the RSA
Rural Residential	0	0	2,814.4	8,329.8

Source: (Township of Conmee 2022).

Note: Some numbers are rounded for presentation purposes. The Project footprint does not intersect the Township of Conmee.



Municipal Zoning Classification	Area (ha) of the Zone in the Project Footprint	Area (ha) of the Zone in the Project Footprint Excluding Existing Access Roads with No Improvements	Area (ha) of the Zone in the LSA	Area (ha) of the Zone in the RSA
Airport Zone	1.4	0	103.2	103.2
Extractive Use	0	0	2.6	2.6
Flood Plain	0	0	10.0	21.2
General Commercial	0	0	26.2	90.5
H-Low Density Residential	0	0	58.6	75.6
Industrial Zone	0	0	60.9	165.5
Institutional Zone	0	0	22.2	25.1
Institutional Zone – Special Exception 1	0	0	0.2	0.2
Institutional Zone – Special Exception 2	0	0	0.1	0.1
Institutional Zone – Special Exception 3	0	0	0.2	0.2
Local Commercial	0	0	0	0.4
Low Density Residential	0	0	54.8	90.2
Mobile Home Park Residential	0	0	0.3	21.9
Multiple Residential	0	0	2.5	3.3
Open Space	0	0	10.6	14.9
Rural Commercial	0	0	11.1	15.1
Rural Residential	0	0	58.2	71.2

Table 7 1-18 [.]	Municinal Land Use 7	oning in the Study	Areas for the Town	shin of Ignace
	wumenpar Lanu 05e Z	oning in the Study /	Aleas for the rown	sinp of ignace



Municipal Zoning Classification	Area (ha) of the Zone in the Project Footprint	Area (ha) of the Zone in the Project Footprint Excluding Existing Access Roads with No Improvements	Area (ha) of the Zone in the LSA	Area (ha) of the Zone in the RSA
Rural Zone	17.0	0	3,491.2	5,584.5
Special Purpose Rural Zone	0	0	10.4	10.4
Special Purpose Rural Zone -1	0	0	0	41.7
Special Purpose Rural Zone -2	0	0	590.9	696.2
Special Purpose Rural Zone -3	0	0	18.5	386.9
Special Purpose Settlement Zone-1	0	0	0.4	0.4
Special Purpose Settlement Zone-2	0	0	0	2.4
Special Purpose Settlement Zone-3	0	0	0.9	0.9
Special Purpose Settlement Zone-4	0	0	2.1	2.1
Tourist Commercial	0	0	5.4	61.3
Water	0	0	2.9	2.9



Municipal Zoning Classification	Area (ha) of the Zone in the Project Footprint	Area (ha) of the Zone in the Project Footprint Excluding Existing Access Roads with No Improvements	Area (ha) of the Zone in the LSA	Area (ha) of the Zone in the RSA
Waste Disposal/Utilities Zone	0	0	20.4	1.2
Waterfront Residential Zone	0	0	0	20.4

Source: (Township of Ignace 2022).

Note: Some numbers are rounded for presentation purposes.





Table 7.1-19:	Unincorporated/Unorganized Municipalities, Townships, and Districts that intersect both the Project					
ROW and the LSA						

District	Municipalities and Unincorporated Townships intersecting the Project ROW	Municipalities and Unincorporated Townships intersecting the LSA
District of Thunder Bay	 Municipalities Municipality of Shuniah Unorganized/Unincorporated Townships Finmark East Gorham (includes Fowler Township, Gorham Township, Jacques Township, Lappe Township, Ware Township) Kabaigon Kabaigon Kashabowie Mabella Shabaqua Shabaqua Corners Shebandowan Sistonens Corners Sunshine Toimela Upsala 	 Municipalities City of Thunder Bay (includes Intola, Kivikoski, North Mcintyre) Municipality of Oliver Paipoonge Municipality of Shuniah Township Of Conmee Township Of O'Connor Unorganized/Unincorporated Townships Finmark East Gorham (includes Fowler Township, Gorham Township, Jacques Township, Lappe Township, Ware Township) Kabaigon Kashabowie Mabella Shabaqua Corners Shebandowan Sistonens Corners Sunshine Toimela Upsala
District of Rainy River	 Municipalities Town of Atikokan Unorganized/Unincorporated Townships Kawene Sapawe 	 Municipalities Town of Atikokan Unorganized/Unincorporated Townships Kawene Sapawe



District	Municipalities and Unincorporated Townships intersecting the Project ROW	Municipalities and Unincorporated Townships intersecting the LSA
District of Kenora	 Municipalities City of Dryden 	 Municipalities City of Dryden
	 Unorganized/Unincorporated Townships Borups Corners Butler Diponvio 	 Town of Ignace Unorganized/Unincorporated Townships Borups Corners Butter
	 Dinorwic Dyment Greater Oxdrift Two Mile Corner Wabigoon 	 Dinorwic Dyment Greater Oxdrift Two Mile Corner Wabigoon

Source: (MND 2023)





7.1.7.2.3.2 Current Land Use in the Proposed Project Right-of-Way

The Project footprint crosses a mixture of Crown and private land. The Project will require Hydro One to obtain private land rights from 257 directly impacted landowners consisting of 230 privately held properties, 15 Crown properties, 8 municipally held properties and 4 railway crossings.

7.1.7.3 Forestry Resources

7.1.7.3.1 Regulatory Context and Overview

Regulation and management of forestry in Ontario occur through specific statutory and regulatory frameworks. The MNRF is responsible for the long-term health of Crown forests. Forest management and associated activities are governed by the *Crown Forest Sustainability Act, 1994* and its associated manuals and guidelines (Government of Ontario 2020).

The *Crown Forest Sustainability Act, 1994* outlines how forest management planning, forest resource agreements, licenses, revenue collection, and trust funds are regulated; information management; forest operations, compliance, remedies, and enforcement mechanisms; licensing of scalers (people who measure wood harvested); and regulation of independent forest audits (*Crown Forest Sustainability Act, 1994*).

In June 2020, Regulation 344 of the *Environmental Assessment Act* was amended and Declaration Order MNR-75 – Environmental Assessment Requirements for Forest Management on Crown Lands in Ontario was revoked as part of EA modernization efforts. The changes removed duplication between the *Environmental Assessment Act* requirements and the MNRF policies, regulations, and guidelines (*Environmental Assessment Act* 1990). Although Declaration Order MNR-75 is revoked, requirements of the Declaration Order MNR-75 have largely been incorporated into existing MNRF policies, manuals, programs, and procedures. Going forward, the *Crown Forest Sustainability Act, 1994* and the Forest Management Planning Manual (as well as other related guidance documents) will be the primary source of direction for forest management in Ontario. These changes were also completed to eliminate administrative burden for the forestry sector while ensuring that forest management in Ontario continues in a way that is protective of the environment (*Crown Forest Sustainability Act, 1994*; *Environmental Assessment Act*; Government of Ontario 2020).

Forest Management Planning Manuals (FMPMs) provide direction for all aspects of forest management planning on designated management units in Ontario's Crown forests under the *Crown Forest Sustainability Act, 1994* (MNRF 2023c). FMPMs provide specific direction for the preparation of forest management plans (FMPs). Forest management planning in Ontario is conducted at the Forest Management Unit (FMU) scale, where FMUs are managed by various Indigenous and non-Indigenous companies under a variety of licencing agreements. FMPs for each FMU are prepared and approved for a 10-year period and determine how much/where harvesting can occur, where roads can be built and how much forest will be renewed. These plans are prepared by Registered Professional Foresters with input from local citizens,



Indigenous communities, stakeholders and the public, to support sustainable harvesting and economic, social and environmental values (MNRF 2023c).

There are six FMUs that overlap the Project footprint including the Boundary Waters Forest, the Dog River-Matawin Forest, the Dryden Forest, the English River Forest, the Lakehead Forest, and the Wabigoon Forest (MNRF 2022h). The most current and applicable forest management planning documents for the FMUs overlap the Project footprint include:

- The Boundary Waters Forest Management Plan (includes the Crossroute-Sapawe Forest) (2020-2030);
- The Dog River-Matawin Forest Management Plan (2021-2031);
- The Dryden Forest Management Plan (2021-2031);
- The English River Forest Management Plan (2019-2029);
- The Lakehead Forest Management Plan (2020-2030); and
- The Wabigoon Forest Management Plan (2019-2029) (MNRF 2022h).

The forest management planning process includes the identification of measurable indicators to assess the effectiveness of activities at achieving management objectives, and to assess the sustainability of the forest including regard for plant life, animal life, water, soil, air, and socioeconomic values (including recreational and heritage values). The FMPM also requires the development of a management strategy for existing access roads and outlines obligations and considerations for the construction of new primary, branch, and operational roads (MNRF 2023d). A use management strategy includes for each road, the road's purpose and description, and roles/responsibilities related to use, maintenance, control, decommissioning, and monitoring of roads on Crown lands. Use management strategies and road planning must be documented in the FMPs. Sustainable Forest License (SFL) holders are responsible for the construction, maintenance, and liabilities associated with all forest roads and water crossings (MNRF 2023d).

Generally, harvest operations of non-forestry industry operations are approved through the issurance of an overlapping licence. These include such operations as "personal use" fence posts and building logs, "personal use" fuelwood, utility line ROW clearing, mining exploration and development, non-forest industry access roads and clearing of aggregate pits. The MNRF will assume responsibility for inspections and investigations, while the forest licence company will be consulted prior to the issuance of such licences (MNRF 2023d).

Additionally, the Forest Management Guide for Boreal Landscapes (the Landscape Guide) provides direction for the development of FMPs. The Landscape Guide is intended to "direct forest management activities to maintain or enhance natural landscape structure, composition, and patterns that provide for the long-term health of forest ecosystems in an efficient and



effective manner" (MNRF 2023e). On private lands, the *Forestry Act* and/or the *Municipal Act* may apply (*Forestry Act 1990*; *Municipal Act 2001*).

7.1.7.3.2 Forestry Activities in the Study Areas

Regional Study Area

There are seven FMUs that overlap the RSA. These are the Black Spruce Forest, the Wabigoon Forest, the Dog River-Matawin Forest, the English River Forest, the Boundary Waters Forest, the Dryden Forest, and the Lakehead Forest. The RSA overlaps approximately 767,553.6 ha (10.5%) of FMUs that overlap a portion of the RSA. FMUs that overlap parts of the RSA are licensed to Resolute FP Canada Inc., Domtar Inc., Dryden Forest Management Company Ltd., and Greenmantle Forest Inc. There are six forest processing facilities located within the RSA including three sawmills (one small and two large), one wood pellet facility, one fuelwood facility, and one pulp/paper/ paperboard facility (MNRF 2022h).

Local Study Area

There are six FMUs that overlap the LSA including the Wabigoon Forest, the Dog River-Matawin Forest, the English River Forest, the Boundary Waters Forest, the Dryden Forest, and the Lakehead Forest. The LSA overlaps approximately 447,907.8 ha (6.1%) of FMUs that overlaps a portion of the LSA. FMUs that overlap parts of the LSA are licensed to Resolute FP Canada Inc., Domtar Inc., Dryden Forest Management Company Ltd., and Greenmantle Forest Inc. There are six forest processing facilities located within the LSA including three sawmills (one small and two large), one wood pellet facility, one fuelwood facility, and one pulp/paper/ paperboard facility (MNRF 2022h).

Project Footprint

There are six FMUs that overlap the Project footprint including the Wabigoon Forest, the Dog River-Matawin Forest, the English River Forest, the Boundary Waters Forest, the Dryden Forest, and the Lakehead Forest. The Project footprint overlaps approximately 5,123.7 ha (0.1%) of FMUs identified as overlapping a portion of the Project footprint. FMUs that overlap parts of the Project footprint are licensed to Resolute FP Canada Inc., Domtar Inc., Dryden Forest Management Company Ltd., and Greenmantle Forest Inc. There is one forest processing facility located within the Project footprint that includes a sawmill (small) located within the Thunder Bay Metropolitan Area (MNRF 2022h).

Table 7.1-20 provides a summary of area and percent overlap for FMUs located within the Project study areas, the total available harvest area, as well as the total 10-year planned harvest area within the identified FMUs. Table 7.1-21 provides a summary of active forest processing facilities located within the Project study areas.











FMU	Licensee	Size of FMU Area (ha)	Total Available Harvest Area (ha)	Total 10-Year Planned Harvest Area (ha)	FMU Area Crossed by the Projet Footprint (ha)	Percentage of total in the Project Footprint (%)	FMU Area Crossed by the Local Study Area (ha)	Percentage of total in the Local Study Area (%)	FMU Area Crossed by the Regional Study Area (ha)	Percentage of total in the Regional Study Area (%)
Black Spruce Forest	Resolute FP Canada Inc. (#542526)	1,371,513.2	94,124.2	94,107.9	0	0.0%	0	0.0%	1,189.6	0.1%
Boundary Waters Forest	Resolute FP Canada Inc. (#542245)	1,894,829.2	133,497.2	133,422.4	1,327.4	0.1%	131,605.9	6.9%	224,817.9	11.9%
Dog River- Matawin Forest	Resolute FP Canada Inc. (#542459)	1,065,933.7	77,523.9	76,946.8	884.8	0.1%	73,333.8	6.9%	141,238.6	13.3%
Dryden Forest	Dryden Forest Management Company Ltd. (#542444)	307,016.3	14,769.4	14,565.6	661.8	0.2%	60,826.4	19.8%	88,908.6	29.0%
English River Forest	Resolute FP Canada Inc. (#542454)	1,193,394.5	65,422.3	65,396.6	90.2	<0.1%	14,493.9	1.2%	34,263.7	2.9%
Lakehead Forest	Greenmantle Forest Inc. (#542460)	763,685.4	41,419.0	41,357.0	987.3	0.1%	81,242.8	10.6%	130,060.8	17.0%
Wabigoon Forest	Domtar Inc. (#541953)	732,486.4	57,368.0	57,051.0	1,172.2	0.2%	86,405.1	11.8%	147,074.4	20.1%
Total		7,328,858.6	484,124.0	482,847.3	5,123.7	0.1%	447,907.8	6.1%	767,553.6	10.5%

Table 7.1-20:	Forest Management Units and Harvest Area in the Study	Areas
---------------	---	-------

Source: (DFMC 2021; Domtar 2019; Greenmantle Forest Inc. 2020; MNRF 2022h; Resolute FP Canada Inc 2019; Resolute FP Canada Inc 2020; Resolute FP Canada Inc 2021).

Notes: The Black Spruce Forest is not included in the assessment of available and planned harvest volume included in Section 7.1.7.3.2.1 because the Project footprint and LSA do not overlap this FMU.



· ····· · · · · · · · · · · · · · · ·						
Forest Processing Facility	Facility Location	Facility Production	In the Project Footprint	In the Local Study Area	In the Regional Study Area	
Domtar Inc. (1103)	Dryden	Pulp / Paper / Paperboard	Ν	Y	Y	
Dog Lake Firewood Ltd. (2598)	Kaministiquia	Fuelwood	Ν	Y	Y	
Biopower Sustainable Energy Corp (2113)	Atikokan	Pellets	Ν	Y	Y	
Resolute FP Canada Inc. (1301)	Ignace	Sawmill - Large	Ν	Y	Y	
Resolute FP Canada Inc. (2114)	Atikokan	Sawmill - Large	Ν	Y	Y	
366956 Ontario Limited o/a Garden Lake Timber (2511)	Thunder Bay	Sawmill - Small	Y ⁽¹⁾	Y	Y	

Table 7.1-21: Forest Processing Facilities in the Study Areas

1) The Project footprint includes an existing access road where no improvements adjacent to this wood processing facility. There is a small overlap of the approximate access road area and the land parcel for the forest processing facility.

Source: (MNRF 2022h).

7.1.7.3.2.1 Available and Planned Harvest in the Project Footprint

Additional details related to the total and planned available harvest volume in FMPs located within the Project footprint are outlined below. An assessment of available and planned harvest volume for the Black Spruce FMP is not included within Section 7.1.7.3.2.1 because the Project footprint and LSA do not overlap this FMU. The following section discusses the available and planned harvest volumes for the Boundary Waters Forest (including the Crossroute-Sapawe Forest) the Dog River-Matawin Forest, the Dryden Forest, the English River Forest, the Lakehead Forest, and the Wabigoon Forest.

Boundary Waters Forest Management Plan (includes Crossroute-Sapawe Forest) (2020 – 2030)

The Boundary Waters FMU is approximately 1,894,829.2 ha in size and the total available harvest area is 133,497.2 ha, while the total 10-year planned harvest area is 133,422.4 ha. The Project footprint overlaps 1,327.4 ha (0.1%) of the total Boundary Waters FMU area (MNRF 2022h; (Resolute FP Canada Inc 2020).

The total available harvest volume for the 2020-2030 FMP is 23,931,185 m³ for the ten-year period, of which 12,632,944 m³ is net merchantable timber and 11,298,241 m³ is undersize/defect volume. The available net merchantable conifer volume is 7,491,825 m³, and 5,141,119 m³ of hardwood (Resolute FP Canada Inc 2020).



The total planned harvest volume for the 2020-2030 FMP is 18,879,943 m³ for the 10-year period, of which 12,979,630 m³ is net merchantable timber and 5,900,313 m³ is undersize/defect volume. The planned net merchantable conifer volume is 7,738,889 m³ and 5,240,741 m³ of hardwood (Resolute FP Canada Inc 2020).

The total available harvest volume is higher than the planned harvest volumes are; the planned volumes are 78.9% of the available volume (82.3% for conifer and 74.8% for hardwood) (Resolute FP Canada Inc 2020).

Other factors that result in differences between the available and planned harvest volumes include forest management planning constraints such as the location of existing and planned road access, tourist operator concerns, concerns from members of the general public and other operational considerations such as the economics of short and/or long-term access on a stand-by-stand and/or aggregate area basis (Resolute FP Canada Inc 2020).

Dog River – Matawin Forest Management Plan (2021 – 2031)

The Dog River-Matawin FMU is approximately 1,065,933.7 ha in size and the total available harvest area is 77,523.9 ha, while the total 10-year planned harvest area is 76,946.8 ha. The Project footprint overlaps 884.8 ha (0.1%) of the Dog River-Matawin FMU (MNRF 2022h; Resolute FP Canada Inc 2021).

The total available harvest volume for the 2021-2031 FMP is 18,129,298 m³ for the ten-year period, of which 8,942,535 m³ is net merchantable timber and 9,186,763 m³ is undersize/defect volume. The available net merchantable conifer volume is 5,492,035 m³, and 3,450,500 m³ of hardwood (Resolute FP Canada Inc 2021).

The total planned harvest volume for the 2020-2030 FMP is 13,528,523 m³ for the 10-year period, of which 8,926,323 m³ is net merchantable timber and 4,602,200 m³ is undersize/defect volume. The planned net merchantable conifer volume is 5,513,429 m³ and 3,412,894 m³ of hardwood (Resolute FP Canada Inc 2021).

The total available and planned harvest volumes are similar; the planned volumes are 74.6% of the available volume (78.3% for conifer and 70.1% for hardwood) (Resolute FP Canada Inc 2021).

Other factors that result in differences between the available and planned harvest volumes include forest management planning constraints such as the location of existing and planned road access, tourist operator concerns, concerns from members of the general public and other operational considerations such as the economics of short and/or long-term access on a stand-by-stand and/or aggregate area basis (Resolute FP Canada Inc 2021).

Dryden Forest Management Plan (2021 – 2031)

The Dryden FMU is approximately 307,016.3 ha in size and the total available harvest area is 14,769.4 ha, while the total 10-year planned harvest area is 14,565.6 ha. The Project footprint overlaps 661.8 ha (0.2%) of the Dryden FMU (DFMC 2021; MNRF 2022h).



The total available harvest volume for the 2021-2031 FMP is 2,725,082 m³ for the ten-year period, of which 1,681,173 m³ is net merchantable timber and 1,043,909 m³ is undersize/defect volume. The available net merchantable conifer volume is 1,203,620 m³, and 477,533 m³ of hardwood (DFMC 2021).

The total planned harvest volume for the 2021-2010 FMP is 2,174,252 m³ for the 10-year period, of which 1,542,675 m³ is net merchantable timber and 631,577 m³ is undersize/defect volume. The planned net merchantable conifer volume is 1,125,994 m³ and 416,682 m³ of hardwood (DFMC 2021)

Other factors that result in differences between the available and planned harvest volumes include forest management planning constraints such as the location of existing and planned road access, tourist operator concerns, concerns from members of the general public and other operational considerations such as the economics of short and/or long-term access on a stand-by-stand and/or aggregate area basis (DFMC 2021).

English River Forest Management Plan (2019 – 2029)

The English River FMU is approximately 1,193,394.5 ha in size and the total available harvest area is 65,422.3 ha, while the total 10-year planned harvest area is 65,396.6 ha. The Project footprint overlaps 90.2 ha (<0.1%) of the English River FMU (MNRF 2022h; Resolute FP Canada Inc 2019).

The total available harvest volume for the 2019-2029 FMP is 11,024,902 m³ for the ten-year period, of which 7,406,233 m³ is net merchantable timber and 3,618,669 m³ is undersize/defect volume. The available net merchantable conifer volume is 5,190,074 m³, and 2,216,159 m³ of hardwood (Resolute FP Canada Inc 2019).

The total planned harvest volume for the 2019-2029 FMP is 9,329,597 m³ for the 10-year period, of which 7,275,465 m³ is net merchantable timber and 2,054,132 m³ is undersize/defect volume. The planned net merchantable conifer volume is 5,166,468 m³ and 2,108,997 m³ of hardwood (Resolute FP Canada Inc 2019).

Other factors that result in differences between the available and planned harvest volumes include forest management planning constraints such as the location of existing and planned road access, tourist operator concerns, concerns from members of the general public and other operational considerations such as the economics of short and/or long-term access on a stand-by-stand and/or aggregate area basis (Resolute FP Canada Inc 2019).

Lakehead Forest Management Plan (2020 – 2030)

The Lakehead FMU is approximately 763,685.4 ha in size and the total available harvest area is 41,419.0 ha, while the total 10-year planned harvest area is 41,357.0 ha. The Project footprint overlaps 987.3 ha (0.1%) of the Lakehead FMU (Greenmantle Forest Inc 2020; MNRF 2022h).

The total available harvest volume for the 2020-2030 FMP is 5,707,878 m³ for the ten-year period, of which 4,686,646 m³ is net merchantable timber and 1,021,232 m³ is undersize/defect



volume. The available net merchantable conifer volume is 1,835,401 m³, and 2,851,245 m³ of hardwood (Greenmantle Forest Inc 2020).

The total planned harvest volume for the 2020-2030 FMP is 5,483,618 m³ for the 10-year period, of which 4,460,739 m³ is net merchantable timber and 1,022,879 m³ is undersized/defect volume. The planned net merchantable conifer volume is 1,812,125 m³ and 2,648,614 m³ of hardwood (Greenmantle Forest Inc 2020).

The net merchantable planned harvest volume closely aligns with the net merchantable available volume by conifer and hardwood subtotals with the planned harvest volume being 5 % lower than the available harvest volume (Greenmantle Forest Inc 2020). Other factors that result in differences between the available and planned harvest volumes include forest management planning constraints such as the location of existing and planned road access, tourist operator concerns, concerns from members of the general public and other operational considerations such as the economics of short and/or long-term access on a stand-by-stand and/or aggregate area basis (Greenmantle Forest Inc 2020).

Wabigoon Forest Management Plan (2019 - 2029)

The Wabigoon FMU is approximately 732,486.4 ha in size and the total available harvest area is 57,368.0 ha, while the total 10-year planned harvest area is 57,051.0 ha. The Project footprint overlaps 1,172.2 ha (0.2%) of the Wabigoon FMU (Domtar Inc. 2019; MNRF 2022h).

The total available harvest volume for the 2019-2029 FMP is 8,113,847 m³ for the ten-year period, of which 6,374,456 m³ is net merchantable timber and 1,739,391 m³ is undersize/defect volume. The available net merchantable conifer volume is 4,533,605 m³, and 1,840,851 m³ of hardwood (Domtar Inc. 2019).

The total planned harvest volume for the 2019-2029 FMP is 7,900,136 m³ for the 10-year period, of which 6,269,245 m³ is net merchantable timber and 1,630,891 m³ is undersize/defect volume. The planned net merchantable conifer volume is 4,229,639 m³ and 2,039,606 m³ of hardwood (Domtar Inc. 2019).

Other factors that result in differences between the available and planned harvest volumes include forest management planning constraints such as the location of existing and planned road access, tourist operator concerns, concerns from members of the general public and other operational considerations such as the economics of short and/or long-term access on a stand-by-stand and/or aggregate area basis (Domtar 2019).

A detailed description of forestry features in the Project footprint, and LSA and RSA are presented in Table 7.1-20, Table 7.1-21, and Figure 7.1-4.







ONSULTANT		YYYY-MM-DD	2023-10-30	2023-10-30	
vsp		DESIGNED	NA		
		PREPARED	DB		
		REVIEWED	НК		
		APPROVED	CS		







	YYYY-MM-DD	2023-10-30
	DESIGNED	NA
	PREPARED	DB
	REVIEWED	НК
•	APPROVED	CS



Lano				- 1.				
LEGEN	ID							
\overline{ullet}	FOREST PROCESSING FACILITY		NEW ACCESS ROAD - PREFERRED		WATERBODY	0	10	20
0	MNO COUNCIL OFFICE		NEW ACCESS ROAD - ALTERNATE		CONSERVATION RESERVE			
	230 KV TRANSFORMER STATION (TS)	::::	PREFERRED ROUTE TRANSMISSION LINE RIGHT-OF-WAY		ENHANCED MANAGEMENT AREA	1:300,000		KILOMETRES
00	EXISTING TRANSMISSION LINE	::::	D26A / F25A CIRCUIT SEPARATION		FOREST RESERVE			
	NATURAL GAS PIPELINE		AGGREGATE SITE		PROVINCIAL PARK			
	RAILWAY		FLY YARD		WILDERNESS AREA	HYDRO ONE NETWORK	S INC.	
	LOCAL ROAD		CAMP / LAYDOWN		FORESTRY HARVEST AREA (2020-2021)			
	SECONDARY HIGHWAY	\square	CONSTRUCTION CAMP (NO LONGER TO BE USED)	FORE	ST MANAGEMENT UNIT			
	RESOURCE / RECREATION		FLY YARD / CAMP / LAYDOWN		BOUNDARY WATERS FOREST	CONSULTANT	YYYY-MM-DD	2023-10-30
	WATERCOURSE		LOCAL STUDY AREA		DRYDEN FOREST		DESIGNED	NA
_	EXISTING ACCESS ROAD - NO IMPROVEMENTS		REGIONAL STUDY AREA		ENGLISH RIVER FOREST		PREPARED	DB
		12.24	TREATY BOUNDARY		WABIGOON FOREST		REVIEWED	НК
	EXISTING ACCESS ROAD - FOTENTIAL IMPROVEMENTS		FIRST NATIONS RESERVE				APPROVED	CS

REFERENCE(S) BASE DATA COURTESY OF LAND INFORMATION ONTARIO MNRF. IMAGERY COPYRIGHT © ESRI AND ITS LICENSORS. USED UNDER LICENSE, ALL RIGHTS RESERVED. PROJECTION: NAD 1983 CSRS UTM ZONE 15N

PROJECT

WAASIGAN TRANSMISSION LINE

TITLE FORESTRY FEATURES IN THE STUDY AREAS PROJECT NO. CONTROL FIGURE REV. 7.1.4-3 20137728 0030 1



ONSULTANT	YYYY-MM-DD	2023-10-30
	DESIGNED	NA
1150	PREPARED	DB
	REVIEWED	НК
	APPROVED	CS



7.1.7.4 Mining Resources

7.1.7.4.1 Regulatory Context and Overview

Mining is regulated by the provisions of the *Mining Act*, which is the provincial legislation that governs and regulates prospecting, mineral exploration, mine development and closure/rehabilitation in Province of Ontario. The purpose of the *Act* is to encourage prospecting, staking and exploration for the development of mineral resources, in a manner consistent with the recognition and affirmation of existing Indigenous and Treaty Rights in Section 35 of the *Constitution Act, 1982*, including the duty to consult, and to minimize the effect of these activities on public health and safety and the environment (*Constitution Act 1982*; *Mining Act* 1990).

The *Mining Act* provides for claim staking. Although a mining claim does not convey the mining rights for the land to the holder, the claim holder does have the exclusive right to explore for minerals and a right to enter upon, use and occupy such parts of the surface rights as are necessary for the purpose of exploration and development. The rights are set out in Section 50 of the *Mining Act* (*Mining Act* 1990). The *Mining Act* prescribes that, where the surface and mining rights are held separately, each of the parties may be liable for damages and compensation to improvements made by the other. Per Section 79 of the *Mining Act*, where the parties are unable to work out a mutually satisfactory agreement, in certain circumstances, it may be appealed to higher courts (MEM 2023a; *Mining Act* 1990).

In the circumstances cited above (i.e., where the surface and mining rights are held by separate parties) the Ministry of Mines (MEM) strongly encourages the rights holders to consult with one another before development begins. A consent to the release or use of surface rights may be required, improvements to the property may be affected, or those holding mining rights have the right to enter upon and use surface rights. Early engagement will help them to understand each other's perspectives so that they can develop their interests, while considering each other's needs. This should help avoid time consuming and costly legal processes (MEM 2023a; *Mining Act* 1990).

Section 81 of the *Mining Act* also sets out a claim holder, after having completed certain steps required in the Act, is entitled to a lease of their claim. The default is for the lease to be for both surface and mining rights; however, a claimholder can opt to take a lease of just mining rights. Prior to the early 1960s, the form of tenure that was granted pursuant to the *Mining Act* was a freehold patent, rather than a lease (in most cases, freehold and leasehold interests issued under the *Mining Act* are known as "patents") (MEM 2023a; *Mining Act* 1990).

As identified in the *Mining Act*, a cell claim is a mining claim, other than a boundary claim that is related to all of the land included in one or more cells on the provincial grid that are subject to the limitations set out in the *Mining Act*, subsection 38(5) (MEM 2023a; *Mining Act* 1990).

Unlike claimholders, who do not have the surface or the mining rights to their claims, holders of freehold or leasehold patents have (either through ownership, or through their lease) the mining



rights to their lands. In addition, they will also, in many circumstances, hold the surface rights. Lessees are restricted in the use to which they put the lands – should they use the lands for purposes other than those of the mining industry, their leases can be cancelled (MEM 2023a; *Mining Act* 1990).

Under the *Mining Act*, lands, surface or mining rights or both, can be withdrawn from prospecting, staking, sale and lease. The withdrawal only applies to activities regulated under the *Mining Act* and is not binding on any other regulatory authority. The MEM routinely uses withdrawals to prevent negative third-party interests while the status of specific lands is determined for the purposes of the *Mining Act*, or at the request of other provincial ministries while the lands are being considered for other purposes such as roads, provincial parks or conservation reserves. It is important to note that a withdrawal does not supersede rights obtained under the *Mining Act* previous to the withdrawal. As an example, should a mining claim pre-exist a withdrawal order, the claim holder would still have all of the rights afforded to them under the *Mining Act* (MEM 2023a; *Mining Act* 1990).

An operational alienation is an area of Crown land that has been withdrawn from claim registration or other use for surface rights, mining rights or both surface and mining rights under various legislative authorities like the *Mining Act* or *Public Lands Act*. These lands cannot be bought, sold, or transferred (MEM 2023a; *Mining Act* 1990).

7.1.7.4.2 Mining Activity in the Study Areas

Regional Study Area

There were 10,692 (274,096.1 ha) total operational cell claims identified within the RSA. Four categories of operational cell claims were identified, which consisted of records that include: "active mining claims", "active pending proceedings", "hold special circumstances", and "pending total". There were 10,534 (265,469.0 ha) active mining claims, 53 (1,090.8 ha) active pending proceedings, 10 (163.3 ha) hold special circumstances, and 86 (7,372.7 ha) pending total claims identified. Additionally, there were 240 (140,635.3 ha) operational alienations (active withdrawals) identified within the RSA (MEM 2023b).In total there were 297 mineral occurrences in the RSA. Eight mineral deposit inventory classes were identified, which consisted of records that include: mineral occurrence (185 instances), prospects (32 instances) developed mineral prospect with reserves (17 instances), developed mineral prospect without reserves (2 instances), past producing mine without reserves (8 instances), and producing mines (1 instance) (MEM 2023b).

Other mining features within the RSA included 78 abandoned mine sites (MEM 2023b).

Local Study Area

There were 6,737 (161,872.4 ha) total operational cell claims identified within the LSA. Three categories of operational cell claims were identified, which consisted of records that include: "active mining claims", "active pending proceedings", and "pending total". There were



6,690 (158,111.8 ha) active mining claims, 14 (275.3 ha) active pending proceedings, and 33 (3,485.4 ha) pending total claims identified. Additionally, there were 183 (99,332.6 ha) operational alienations (active withdrawals) identified within the LSA (MEM 2023b). In total there were 164 mineral occurrences in the LSA. Eight mineral deposit inventory classes were identified, which consisted of records that include: mineral occurrence (102 instances), prospects (17 instances) developed mineral prospect with reserves (13 instances), developed mineral prospect without reserves (1 instances), discretionary mineral occurrence (23 instances), past producing mine with reserves (2 instances), past producing mine without reserves (5 instances), and producing mines (1 instance) (MEM 2023b).

Other mining features within the LSA included 42 abandoned mine sites (MEM 2023b).

Project Footprint

There were 1,131 (2,334.1 ha) total operational cell claims identified within the Project footprint. One category of operational cell claims was identified, which consisted of records that include: "active mining claims", of which there were 1,131 (2,334.1 ha) active mining claims identified. Additionally, there were 41 (3,568.8 ha) operational alienations (active withdrawals) identified within the Project footprint (MEM 2023b).In total there were 3 mineral occurrences in the Project footprint. Eight mineral deposit inventory classes were identified, which consisted of records that include: mineral occurrence (2 instances), prospect (1 instances). There are no developed mineral prospect with reserves, developed mineral prospect without reserves, discretionary mineral occurrence, past producing mine with reserves, past producing mine without reserves, and producing mines in the Project footprint (MEM 2023b).

Other mining features within the Project footprint included 1 abandoned mine site (MEM 2023b).

A detailed description of mining features in the Project footprint, LSA and RSA are presented in Table 7.1-22 and Figure 7.1-5.









Type of Mining Resource	Transected by the Project Footprint	Overlapped by the LSA	Overlapped by the RSA
Operational cell claims – active mining claims	Yes	Yes	Yes
Operational cell claims – active pending proceedings	No	Yes	Yes
Operational cell claims – hold special circumstances apply	No	No	Yes
Operational cell claims – pending total	No	Yes	Yes
Operational alienation (active withdrawals)	Yes	Yes	Yes
Mineral occurrence	Yes	Yes	Yes
Mineral occurrence - prospect	Yes	Yes	Yes
Mineral occurrence – developed mineral prospect with reserves	No	Yes	Yes
Mineral occurrence – developed mineral prospect without reserves	No	Yes	Yes
Mineral occurrence – discretionary mineral occurrence	No	Yes	Yes
Mineral occurrence – past producing mine with reserves	No	Yes	Yes
Mineral occurrence – past producing mine without reserves	No	Yes	Yes
Mineral occurrence – producing mine	No	Yes	Yes
Other mining – abandoned mine sites	Yes	Yes	Yes

Table 7.1-22: Mining Resources in the Study Areas

Source: (MEM 2023b).

Note: LSA = Local Study Area; RSA= Regional Study Area; n/a = not available.





Mining Area	# of Sites, Claims, Plans, Classes in the Project Footprint	Area of Sites, Claims, Plans, Classes in the Project Footprint (ha)	# of Sites, Claims, Plans, Classes in LSA	Area of Sites, Claims, Plans, Classes in the LSA (ha)	# of Sites, Claims, Plans, Classes in RSA	Area of Sites, Claims, Plans, Classes in the RSA (ha)
Operational cell claims – active mining claims	1,131	2,334.1	6,690	158,111.8	10,534	265,469.0
Operational cell claims – active pending proceedings	0	0	14	275.3	53	1,090.8
Operational cell claims – hold special circumstances apply	0	0	0	0	10	163.3
Operational cell claims – pending total	0	0	33	3,485.4	86	7,372.7
Total operational cell claims	1,131	2,334.1	6,737	161,872.4	10,692	274,096.1
Operational alienation (active withdrawals)	41	3,568.8	183	99,332.6	240	140,635.3
Total operational alienations	41	3,568.8	183	99,332.6	240	140,635.3
Mineral occurrence	2	n/a	102	n/a	185	n/a
Mineral occurrence - prospect	1	n/a	17	n/a	32	n/a
Mineral occurrence - developed mineral prospect with reserves	0	n/a	13	n/a	17	n/a



Mining Area	# of Sites, Claims, Plans, Classes in the Project Footprint	Area of Sites, Claims, Plans, Classes in the Project Footprint (ha)	# of Sites, Claims, Plans, Classes in LSA	Area of Sites, Claims, Plans, Classes in the LSA (ha)	# of Sites, Claims, Plans, Classes in RSA	Area of Sites, Claims, Plans, Classes in the RSA (ha)
Mineral occurrence - developed mineral prospect without reserves	0	n/a	1	n/a	2	n/a
Mineral occurrence - discretionary mineral occurrence	0	n/a	23	n/a	50	n/a
Mineral occurrence - past producing mine with reserves	0	n/a	2	n/a	2	n/a
Mineral occurrence - past producing mine without reserves	0	n/a	5	n/a	8	n/a
Mineral occurrence - producing Mine	0	n/a	1	n/a	1	n/a
Total mineral occurrences	3	n/a	164	n/a	297	n/a
Other mining – abandoned mine sites	1	n/a	42	n/a	78	n/a
Total other mining	1	n/a	42	n/a	78	n/a

Source: (MEM 2023b).

Note: Some numbers are rounded for presentation purposes. Data on areas of mine sites and abandoned mine sites is not provided by the MEM.

Ha = hectare; LSA = Local Study Area; n/a = not available.









- MINERAL OCCURRENCE 0
- PAST PRODUCING MINE WITH RESERVES 0
- PAST PRODUCING MINE WITHOUT RESERVES \circ 0 PROSPECT
- ABANDONED MINE •
- EXISTING TRANSMISSION LINE
- --- NATURAL GAS PIPELINE
- ---- RAILWAY

- REQUIRED
- EXISTING ACCESS ROAD POTENTIAL IMPROVEMENTS
- NEW ACCESS ROAD PREFERRED
- NEW ACCESS ROAD - ALTERNATE
- PREFERRED ROUTE TRANSMISSION LINE RIGHT-OF-WAY
- D26A / F25A CIRCUIT SEPARATION
- AGGREGATE SITE
- FLY YARD

- 2.24 TREATY BOUNDARY
- FIRST NATIONS RESERVE
- WATERBODY
- CONSERVATION RESERVE
- PROVINCIAL PARK ADVANCED EXPLORATION PLANS
- ACTIVE MINING CLAIM

0	10	0 20	C
1:300,000		KILOMETRES	

CLIENT HYDRO ONE NETWORKS INC.

CONSULTANT	YYYY-MM-DD	2023-11-03
	DESIGNED	NA
NSD	PREPARED	DB
	REVIEWED	НК
	APPROVED	CS

PROJECT WAASIGAN TRANSMISSION LINE

TITLE MINERAL RE AREA	SOURCE ACTIVITIE	S IN THE REGION	AL STUDY
PROJECT NO.	CONTROL	REV.	FIGURE
20137728	0030	1	7.1.5-3



\bigcirc MNO COUNCIL OFFICE

- 230 KV TRANSFORMER STATION (TS)
- 0 DEVELOPED MINERAL PROSPECT WITH RESERVES
- 0 DISCRETIONARY MINERAL OCCURRENCE
- MINERAL OCCURRENCE •
- PAST PRODUCING MINE WITH RESERVES 0
- PROSPECT \circ
- ABANDONED MINE •
- EXISTING TRANSMISSION LINE --- NATURAL GAS PIPELINE
- ----- RAILWAY

- ----- LOCAL ROAD
- ----- SECONDARY HIGHWAY RESOURCE / RECREATION
- WATERCOURSE
- EXISTING ACCESS ROAD NO IMPROVEMENTS
- REQUIRED EXISTING ACCESS ROAD - POTENTIAL IMPROVEMENTS
- NEW ACCESS ROAD - PREFERRED
- NEW ACCESS ROAD ALTERNATE
- PREFERRED ROUTE TRANSMISSION LINE RIGHT-OF-WAY
- AGGREGATE SITE

- FLY YARD
- \square CAMP / LAYDOWN
- LOCAL STUDY AREA
- REGIONAL STUDY AREA
- TREATY BOUNDARY 2.24
- FIRST NATIONS RESERVE
- WATERBODY
- CONSERVATION RESERVE
- PROVINCIAL PARK ADVANCED EXPLORATION PLANS
- ACTIVE MINING CLAIM

0	10	20
1:300,000		KILOMETRES



	YYYY-MM-DD	2023-11-03
	DESIGNED	NA
	PREPARED	DB
	REVIEWED	НК
	APPROVED	CS

REFERENCE(S) BASE DATA COURTESY OF LAND INFORMATION ONTARIO MNRF. IMAGERY COPYRIGHT © ESRI AND ITS LICENSORS. USED UNDER LICENSE, ALL RIGHTS RESERVED. PROJECTION: NAD 1983 CSRS UTM ZONE 15N

PROJECT

WAASIGAN TRANSMISSION LINE

 TITLE MINERAL RE AREA	SOURCE ACTIN	VITIES IN THE REGIONAL	L STUDY
PROJECT NO.	CONTROL	REV.	FIGURE
20137728	0030	1	7.1.5-4


7.1.7.5 Aggregate Resources

7.1.7.5.1 Regulatory Context and Overview

Regulation and management of minerals and aggregates in Ontario occurs through specific statutory and regulatory frameworks.

Aggregate resources in the Province of Ontario are regulated under the *Aggregate Resources Act* (*Aggregate Resources Act* 1990). The MNRF manages aggregate resources in collaboration with The Ontario Aggregate Resources Cooperation. Aggregate extraction on Crown land requires an Aggregate Permit, and aggregate extraction on private land requires an Aggregate Licence if the private land is within an Aggregate Designated Area.

Applications for an aggregate license or permit will follow the process outlined in the Aggregate Resources Application Standards and Regulation (O.Reg. 244/97). Additionally, the requirements for aggregate applications are outlined within the Aggregate Resources of Ontario: Technical Reports and Information Standards (2020).

MTO owns aggregate sites across the province that provide the material necessary to build roadways in the province (MNRF 2022h). These aggregate pits are composed of three operation types; quarry, pit, and pit/quarry (MNRF 2022h).

7.1.7.5.2 Aggregate Activities in the Study Areas

Table 7.1-24 provides detail on the presence of aggregate resources in the Project footprint, LSA, and RSA, while Table 7.1-25 provides detail on the number and/or area of aggregate designated areas, active and inactive aggregate pits and sites (including forestry aggregate pits and MTO aggregate pits) in the Project footprint, LSA, and RSA.

Regional Study Area

There are 132 active aggregate sites that overlap the RSA, 37 inactive sites, 104 forest aggregate pits and 49 MTO aggregate pits (MNRF 2022h).

Overall, there are 94,314.5 ha of aggregate designated areas, 4,371.3 ha of active aggregate sites, 1,747.2 ha of MTO aggregate pits, and 123.5 ha of inactive aggregate sites (MNRF 2022h).

Local Study Area

There are 100 active aggregate sites in the LSA, with 28 inactive aggregate sites, 57 forest aggregate pits and 38 MTO aggregate pits (MNRF 2022h).

Overall, there are, 58,178.2 ha of aggregate designated areas, 2,896.2 ha of active aggregate sites, 1,250.4 ha of MTO aggregate pits and 102.8 ha of inactive aggregate sites (MNRF 2022h).





Project Footprint

There are 36 active aggregate sites in the Project footprint, 11 inactive aggregate sites, four forest aggregate pits, and ten MTO aggregate pits, as shown in Table 7.1-25.

Overall, there are 642.6 ha of aggregate designated areas, 70.8 ha of active aggregate sites, 144.7 ha of MTO aggregate pits, and 14.0 ha of inactive aggregate sites (MNRF 2022h).

A detailed description of aggregate resources in the Project study areas are presented in Table 7.1-24 and Table 7.1-25:. Figure 7.1-6 provides an overview of aggregate resource sites located throughout the RSA.

Type of Aggregate Resource	Transected by the Project Footprint	Overlapped by the LSA	Overlapped by the RSA
Aggregate designated areas	Yes	Yes	Yes
Active aggregate sites	Yes	Yes	Yes
Inactive aggregate sites	Yes	Yes	Yes
Forestry aggregate pits	Yes	Yes	Yes
MTO aggregate pits	Yes	Yes	Yes

Table 7.1-24: Aggregate Resources in the Study Areas

Source: (MNRF 2022h).

Note: LSA = Local Study Area; RSA= Regional Study Area; n/a = not applicable









Aggregate Uses	Number in the Project Footprint	Area in the Project Footprint (ha)	Number in the LSA	Area in the LSA (ha)	Number in the RSA	Area in the RSA (ha)
Aggregate designated areas	n/a	642.6	n/a	58,178.2	n/a	94,314.5
Active aggregate sites	36	70.8	100	2,896.2	132	4,371.3
Inactive aggregate sites	11	14.0	28	102.8	37	123.5
Forestry aggregate pits	4	n/a	57	n/a	104	n/a
MTO aggregate pits	10	44.7	38	1,250.4	49	1,747.2
Total	61	772.1	223	62,427.6	322	100,556.5

Table 7.1-25: Aggregate Pits, Associated Infrastructure, and Aggregate Designated Areas in the Study Areas

Source: (MNRF 2022h).

Note: Some numbers are rounded for presentation purposes. Therefore, it may appear that the totals do not equal the sum of the individual values.

% = percent; ha = hectares; LSA = Local Study Area; MTO = Ministry of Transportation; n/a = not available; RSA = Regional Study Area











ONSULTANT	YYYY-MM-DD	2023-11-03
	DESIGNED	NA
\\ \$D	PREPARED	DB
	REVIEWED	НК
	APPROVED	CS



0	10	20
1:300,000		KILOMETRES

TANT		YYYY-MM-DD	2023-11-03
wsp	DESIGNED	NA	
		PREPARED	DB
		REVIEWED	НК
	•	APPROVED	CS

PROJECT NO.	CONTROL	REV.	FIGURE
20137728	0030	1	7.1.6-4



7.1.7.6 Hunting, Trapping, and Fishing

7.1.7.6.1 Regulatory Context and Regional Overview

In Northwestern Ontario, hunting, trapping, and fishing represent key components of recreation and the tourism economy and are regulated through the *Fish and Wildlife Conservation Act*, *1997*. The Act identifies restrictions on hunting and fishing, presents licensing and safety requirements and outlines hunting methods permitted for hunters and anglers (*Fish and Wildlife Conservation Act 1997*).

Geographically, the MNRF manages hunting activities through 95 regulated wildlife management units (WMUs). The MNRF has established customized restrictions in each WMU related to the types of game that can be harvested, open season dates, and hunting methods permitted to effectively balance wildlife populations with the demands of harvesting activities (MNRF 2022c). These criteria help the Province of Ontario manage wildlife populations by establishing unit-specific limits and seasons (MNRF 2022f). The MNRF monitors harvest data to establish sustainable hunting seasons year over year, and to assess levels of activity in each WMU. Hunting licences must be purchased in order to legally harvest wildlife in the province (MNRF 2022e).

With respect to trapping, access to trapline tenures is gained by obtaining a licence from the MNRF, which can be secured by proving Canadian citizenship, holding a valid hunting/fishing Outdoors Card, and successfully completing the MNRF's Fur Harvest, Fur Management and Conservation Course (MNRF 2022k). With each licence, access to trapline areas and their harvests are provided and monitored. This allows the MNRF to monitor furbearer populations through seasons and harvest quotas (MNRF 2022k).

The MNRF manages fishing activities through 20 Fisheries Management Zones (FMZs). As Canada's largest high yield fishing destination, tourism-based fishing is an economic driver for northwestern Ontario. Northwestern Ontario is recognized as offering some of the best fishing opportunities in North America; a primary reason it attracts local, regional, and international tourists to its numerous lakes and rivers. The remote fishing experience is considered a 'signature experience' for northern regions, offering many sport fishing opportunities at drive-in, boat-in, and fly-in access lodges or outposts (Research Resolution and Consulting Ltd. 2015).

Species-specific fishing seasons are established in each FMZ, in order to manage and protect fish populations and consider different fishing climates, while also allowing for fishing opportunities (MNRF 2022d). FMZ restrictions are monitored by the MNRF and adjusted annually, as needed. Fishing licences must be purchased in order to legally harvest wildlife and fish in the province (MNRF 2022e)

For Lake Trout lakes described in Section 7.1.7.6.5 (Fishing Activities in the Study Areas), the Inland Ontario Lakes Designated for Lake Trout Management (2006) and the Amendment to Area specific Crown Land Use Policy #2007-025 (2009) (Update to Area-specific Land Use



Policy to Reflect Updated Crown Land Disposition Policy for Designated Lake Trout Lakes) documents apply (MNRF 2023a).

Hunting, trapping, and fishing actively occurs throughout the RSA, by local residents who hunt, trap, and fish for sport and food, as well as by visiting hunters and anglers. Traditional hunting and fishing by Indigenous community members also occurs in the RSA as well, for food, social and cultural purposes. Information about traditional land and resource use is presented in Section 7.7 (First Nations Rights, Interests and Use of Land and Resources) and Section 7.8 (Métis Rights, Interests and Use of Land and Resources).











0_PROD\0030_LandUse\201377

25mm IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, TH



PROJECT NO.	CONTROL	REV.	FIGURE
20137728	0030	1	7.1.7-2

CS



- \rightarrow RAILWAY LOCAL ROAD
- SECONDARY HIGHWAY
- RESOURCE / RECREATION
- WATERCOURSE
- EXISTING ACCESS ROAD NO IMPROVEMENTS ____ REQUIRED
- EXISTING ACCESS ROAD POTENTIAL IMPROVEMENTS

- AGGREGATE SITE
- FLY YARD
- \square CAMP / LAYDOWN
- \square CONSTRUCTION CAMP (NO LONGER TO BE USED) FLY YARD / CAMP / LAYDOWN
- LOCAL STUDY AREA
- REGIONAL STUDY AREA

- PROVINCIAL PARK 2.75 BEAR MANAGEMENT AREA BAIT HARVEST AREA
- WILDLIFE MANAGEMENT UNIT FISHERIES MANAGEMENT ZONE
- LAKE TROUT LAKE
- TRAPLINE AREA

- CLIENT HYDRO ONE NETWORKS INC.
- CONSULTANT YYYY-MM-DD 2023-10-30 DESIGNED NA **\\S**D PREPARED DB REVIEWED ΗK APPROVED CS

PROJECT WAASIGAN TRANSMISSION LINE

TITLE HUNTING, TRAPPING, AND FISHING IN THE REGIONAL STUDY AREA

PROJECT NO.	CONTROL	REV.	FIGURE
20137728	0030	1	7.1.7-3



REVIEWED

APPROVED

ΗK

CS

HUNTING, TF	RAPPING, AND FISH	IING IN THE REGIO	NAL STUDY
PROJECT NO. 20137728	CONTROL	REV. 1	FIGURE 7.1.7-4



7.1.7.6.2 Hunting Activities in the Study Areas

Wildlife Management Units

There are ten WMUs that intersect the Project footprint, LSA and RSA in which hunting activities take place: WMU 5, WMU 8, WMU 9A, WMU 11 A, WMU 11B, WMU 11C, WMU 12A, WMU 12B, WMU 13, and WMU 15A (Table 7.1-26). There are 65 BMAs within the RSA (MNRF 2022h).

The WMUs identified above are located, in part, within the Project footprint. The Project footprint overlaps approximately 398.3 ha (<0.1%) of WMU 5, 348.2 (0.1%) of WMU 8, , 131.5 ha (0.3%) of WMU 9A, 273.0 ha (0.1%) of WMU 11A, 378.7 ha (<0.1%) of WMU 11B, 1,283.8 ha (<0.1%) of WMU 12A, 1,303.0 ha (0.2%) of WMU 12B has the largest amount of land in the Project footprint (1,303.0 ha) (MNRF 2022h).

WMU 12A has 1283.8 ha in the Project footprint, and WMU 13 had 986.7 ha. The number of ha of land in the Project footprint for WMU 11B, WMU 11A, WMU 5 and WMU 8 ranges from 273.0 ha to 398.3 ha, while WMU 9A, WMU 15A and WMU 11C have a range from 131.5ha to <1 ha in the Project footprint (MNRF 2022h).

The amount of land intersected by the Project footprint does not exceed 0.2% of the total size for any of the WMUs identified.

These WMUs, and the hunting locations within the RSA, are accessed primarily through the local road network. The total area of lands for WMUs that intersect the Project is detailed and displayed in Table 7.1-26 and Figure 7.1-7.

Wildlife Management Units (WMU)	Area of the WMU in the Project Footprint (ha)	% Total WMU Area in the Project Footprint	Area of the WMU in the LSA (ha)	% Total WMU Area in the LSA	Area of the WMU in the RSA (ha)	% Total WMU Area in the RSA		
5	398.3	<0.1%	29,927.4	2.8%	51,464.8	4.8%		
8	348.2	0.1%	34,558.4	6.3%	64,585.0	11.7%		
9A	131.5	<0.1%	18,350.3	3.9%	35,439.0	7.6%		
11A	273.0	0.1%	18,596.0	6.4%	24,886.9	8.6%		
11B	378.7	0.2%	34,512.2	17.6%	66,709.6	33.9%		
11C	0.8	<0.1%	9,859.8	2.1%	27,489.5	5.8%		
12A	1,283.8	0.3%	88,322.0	22.0%	138,276.5	34.4%		
12B	1,303.0	0.2%	131,114.6	19.8%	226,248.0	34.2%		
15A	20.5	<0.1%	11,175.8	1.1%	26,146.2	2.5%		

Table 7.1-26: Wildlife Management Units in the Study Areas



Wildlife Management Units (WMU)	Area of the WMU in the Project Footprint (ha)	% Total WMU Area in the Project Footprint	Area of the WMU in the LSA (ha)	% Total WMU Area in the LSA	Area of the WMU in the RSA (ha)	% Total WMU Area in the RSA
13	986.7	0.1%	84,454.6	6.3%	145,275.5	10.8%

Source: (MNRF 2022h)

Note: Some numbers are rounded for presentation purposes. Therefore, it may appear that the totals do not equal the sum of the individual values.

Ha = hectare; % = percent; WMU = Wildlife Management Unit; LSA = Local Study Area; RSA = Regional Study Area.

Hunting Seasons

This baseline description of hunting activities in the LSA focuses on moose, white-tailed deer, and black bear, which are considered three reference species important to recreational hunting in Northwestern Ontario.

For the WMUs transected by the Project footprint, the 2021 moose season for resident hunters (i.e., of the Province of Ontario) ranged from October 15 to December 15; the 2021 deer season for resident hunters ranged from October 8 to December 15; and the 2021 black bear seasons for resident hunters ranged from May 1 to June 15 and August 15 to October 31 (Table 7.1-30) (MNRF 2022f).

Non-resident hunters (i.e., hunters from outside of the Province of Ontario) are more restricted in their moose and deer hunting seasons than residents. The non-resident moose seasons range from October 17 to November 15, and the non-resident deer seasons range from October 8 to November 15; however, non-residents have no deer season in WMUs 5, 11B, 13 and 15A. The non-resident 2016 black bear season runs from May 1 to June 15 and August 15 to October 31 (Table 7.1-30) (MNRF 2022f).

Moose, deer, and bear hunting seasons for residents and non-resident hunters for each WMU within the LSA are presented in Table 7.1-27.









Wildlife Management Units (WMU)	Moose Hunting Seasons for Resident Hunters	Moose Hunting Seasons for Non-resident Hunters	Deer Hunting Seasons for Resident Hunters	Deer Hunting Seasons for Non-resident Hunters	Black Bear Hunting Seasons for Resident Hunters	Black Bear Hunting Seasons for Non-resident Hunters
WMU 5	Oct. 15 to Dec. 15	Oct. 17 to Nov. 15	Oct. 8 to Dec. 15	No season	May 1 to Jun. 15 and Aug. 15 to Oct 31.	May 1 to Jun. 15 and Aug. 15 to Oct 31.
WMU 8	Oct. 15 to Dec. 15	Oct. 17 to Nov. 15	Oct. 8 to Dec. 15	Oct. 8 to Nov. 15	May 1 to Jun. 15 and Aug. 15 to Oct 31.	May 1 to Jun. 15 and Aug. 15 to Oct 31.
WMU 9A	Oct. 15 to Dec. 15	Oct. 17 to Nov. 15	Oct. 8 to Dec. 15	Oct. 8 to Nov. 15	May 1 to Jun. 15 and Aug. 15 to Oct 31.	May 1 to Jun. 15 and Aug. 15 to Oct 31.
WMU 11A	Oct. 15 to Dec. 15	Oct. 17 to Nov. 15	Oct. 8 to Dec. 15	Oct. 8 to Nov. 15	May 1 to Jun. 15 and Aug. 15 to Oct 31.	May 1 to Jun. 15 and Aug. 15 to Oct 31.
WMU 11B	Oct. 15 to Dec. 15	Oct. 17 to Nov. 15	Oct. 8 to Dec. 15	No season	May 1 to Jun. 15 and Aug. 15 to Oct 31.	May 1 to Jun. 15 and Aug. 15 to Oct 31.
WMU 11C	n/a ^(a)	n/a ^(a)	n/a ^(a)	n/a ^(a)	n/a ^(a)	n/a ^(a)
WMU 12A	Oct. 15 to Dec. 15	Oct. 17 to Nov. 15	Oct. 8 to Dec. 15	Oct. 8 to Nov. 15	May 1 to Jun. 15 and Aug. 15 to Oct 31.	May 1 to Jun. 15 and Aug. 15 to Oct 31.
WMU 12B	Oct. 15 to Dec. 15	Oct. 17 to Nov. 15	Oct. 8 to Dec. 15	Oct. 8 to Nov. 15	May 1 to Jun. 15 and Aug. 15 to Oct 31.	May 1 to Jun. 15 and Aug. 15 to Oct 31.
WMU 13	Oct. 15 to Dec. 15	Oct. 17 to Nov. 15	Oct. 8 to Dec. 15	No season	May 1 to Jun. 15 and Aug. 15 to Oct 31.	May 1 to Jun. 15 and Aug. 15 to Oct 31.

Table 7.1-27: Firearm Hunting Regulations for Wildlife Management Units in the Study Areas (2022)



Wildlife Management Units (WMU)	Moose Hunting Seasons for Resident Hunters	Moose Hunting Seasons for Non-resident Hunters	Deer Hunting Seasons for Resident Hunters	Deer Hunting Seasons for Non-resident Hunters	Black Bear Hunting Seasons for Resident Hunters	Black Bear Hunting Seasons for Non-resident Hunters
WMU 15A	Oct. 15 to Dec. 15	Oct. 17 to Nov. 15	Oct. 8 to Dec. 15	No season	May 1 to Jun. 15 and Aug. 15 to Oct 31.	May 1 to Jun. 15 and Aug. 15 to Oct 31.

Source: (MNRF 2022f).

Note: WMU = Wildlife Management Units; n/a = not available/not applicable

a) The lands that make up WMU 11C are within Quetico Provincial Park. Sport hunting within WMU 11C is prohibited under the *Provincial Parks and Conservation Reserves Act, 2006.* Note that some exemptions exist for individuals exercising Indigenous and/or Aboriginal treaty rights.





Moose Harvest Data

The estimated number of resident moose hunters active in the WMUs overlapped by the LSA declined (-9.4%) from 2021 to 2022, where the number of hunters decreased from 3,269 individuals to 2,963 individuals. The trend regarding the number of estimated total moose harvested also declined, with the number decreasing 25.6% from 2021 to 2022, where the number of moose harvested increased from 480 individuals to 357 individuals (MNRF 2022g).

The estimated number of resident moose hunters active in the WMUs overlapped by the LSA declined (-48.5%) from 2016 to 2022, where the number of hunters decreased from 5,748 individuals to 2,963 individuals. The trend regarding the number of estimated total moose harvested also declined from 520 individuals to 357 individuals, representing a decrease of -31.3% (MNRF 2022g).

In 2022, hunters were most active in WMUs 5 (601 hunters), 12B (738 hunters), and 15A (823 hunters) (MNRF 2022g). The largest harvests were consistently gathered from WMUs 12B (92 moose), WMU 5 (91 moose), and 15A (80 moose) (MNRF 2022g).

Publicly available harvest data for moose harvested in the WMUs in the LSA are presented in Table 7.1-28.

Wildlife Management Units (WMU)	Year	Estimated Active Resident Moose Hunters	Estimated Total Moose Harvest by Moose Hunters
WMU 5	2016	794	81
WMU 5	2017	840	56
WMU 5	2018	830	54
WMU 5	2019	937	80
WMU 5	2020	990	88
WMU 5	2021	632	96
WMU 5	2022	601	91
WMU 8	2016	121	10
WMU 8	2017	187	12
WMU 8	2018	198	12
WMU 8	2019	195	6
WMU 8	2020	184	7
WMU 8	2021	62	6
WMU 8	2022	51	10
WMU 9A	2016	466	42
WMU 9A	2017	419	38
WMU 9A	2018	265	12
WMU 9A	2019	231	16
WMU 9A	2020	231	21
WMU 9A	2021	78	9

Table 7.1-28: Moose Hunters and Harvest by Wildlife Management Unit (2016 to 2022)





Wildlife Management	Year	Estimated Active	Estimated Total Moose
	0000	Resident Moose Hunters	Harvest by Moose Hunters
WINU 9A	2022	85	13
WMU 11A	2016	234	33
WMU 11A	2017	200	21
WMU 11A	2018	144	11
WMU 11A	2019	1/1	16
WMU 11A	2020	193	19
WMU 11A	2021	107	15
WMU 11A	2022	106	13
WMU 11B	2016	358	33
WMU 11B	2017	371	30
WMU 11B	2018	404	34
WMU 11B	2019	267	23
WMU 11B	2020	270	16
WMU 11B	2021	193	19
WMU 11B	2022	152	17
WMU 11C	2016	n/a ^(a)	n/a ^(a)
WMU 11C	2017	n/a ^(a)	n/a ^(a)
WMU 11C	2018	n/a ^(a)	n/a ^(a)
WMU 11C	2019	n/a ^(a)	n/a ^(a)
WMU 11C	2020	n/a ^(a)	n/a ^(a)
WMU 11C	2021	n/a ^(a)	n/a ^(a)
WMU 11C	2022	n/a ^(a)	n/a ^(a)
WMU 12A	2016	547	49
WMU 12A	2017	590	45
WMU 12A	2018	384	22
WMU 12A	2019	446	36
WMU 12A	2020	442	36
WMU 12A	2021	270	40
WMU 12A	2022	224	25
WMU 12B	2016	1,131	117
WMU 12B	2017	1,134	98
WMU 12B	2018	1,195	92
WMU 12B	2019	1,126	114
WMU 12B	2020	1,140	98
WMU 12B	2021	777	120
WMU 12B	2022	738	92
WMU 13	2016	1.051	50
WMU 13	2017	1,075	64



Wildlife Management Units (WMU)	Year	Estimated Active Resident Moose Hunters	Estimated Total Moose Harvest by Moose Hunters
WMU 13	2018	908	47
WMU 13	2019	791	37
WMU 13	2020	765	28
WMU 13	2021	247	32
WMU 13	2022	181	16
WMU 15A	2016	1,046	105
WMU 15A	2017	1,035	94
WMU 15A	2018	984	70
WMU 15A	2019	960	90
WMU 15A	2020	981	74
WMU 15A	2021	903	143
WMU 15A	2022	823	80

Source: (MNRF 2022g).

Note: WMU = Wildlife Management Units; n/a = not available/not applicable

a) The lands that make up WMU 11C are within Quetico Provincial Park. Sport hunting within WMU 11C is prohibited under the *Provincial Parks and Conservation Reserves Act, 2006*. Note that some exemptions exist for individuals exercising Indigenous and/or Aboriginal treaty rights.

Deer Harvest Data

The estimated number of resident deer hunters active in the WMUs overlapped by the LSA declined (-15.7%) from 2021 to 2022, where the number of hunters decreased from 5,933 individuals to 5051 individuals. The trend regarding the number of estimated total deer harvested also declined from 2,967 to 1,824, representing a decrease of 38.5% for the same period of time (MNRF 2022I).

The estimated number of resident deer hunters active in the WMUs overlapped by the LSA declined from 2016 to 2022, where the number of hunters decreased from 8,906 individuals to 5,051 individuals (-43.3%). The trend regarding the number of estimated total deer harvested also declined from 3,753 individuals to 1,824 individuals, representing a decrease of 51.4% for the same period of time (MNRF 2022I).

In 2022, hunters were most active in WMUs 8 (1,380 hunters) and 13 (2,659 hunters) and (MNRF 2022I). The largest harvests were consistently gathered from WMUs 8 (751 deer) and 13 (942 deer) (MNRF 2022I).

Publicly available harvest data for deer in the LSA is presented in Table 7.1-29.



Wildlife Management	Estimated Active		Estimated Total Deer Harvest	
Units (WMU)	Year	Resident Deer Hunters	by Resident Hunters	
WMU 5	2016	979	82	
WMU 5	2017	739	173	
WMU 5	2018	843	87	
WMU 5	2019	496	52	
WMU 5	2020	505	74	
WMU 5	2021	382	59	
WMU 5	2022	304	24	
WMU 8	2016	1,654	1,062	
WMU 8	2017	1,620	1,324	
WMU 8	2018	1,584	996	
WMU 8	2019	1,429	1,021	
WMU 8	2020	1,634	1,324	
WMU 8	2021	1,515	1,287	
WMU 8	2022	1380	751	
WMU 9A	2016	353	24	
WMU 9A	2017	297	27	
WMU 9A	2018	364	25	
WMU 9A	2019	196	25	
WMU 9A	2020	226	23	
WMU 9A	2021	168	38	
WMU 9A	2022	141	27	
WMU 11A	2016	423	155	
WMU 11A	2017	415	153	
WMU 11A	2018	366	145	
WMU 11A	2019	287	54	
WMU 11A	2020	266	40	
WMU 11A	2021	224	35	
WMU 11A	2022	188	31	
WMU 11B	2016	258	40	
WMU 11B	2017	173	25	
WMU 11B	2018	156	27	
WMU 11B	2019	69	4	
WMU 11B	2020	85	0	
WMU 11B	2021	61	2	
WMU 11B	2022	51	4	
WMU 11C	2016	n/a ^(a)	n/a ^(a)	
WMU 11C	2017	n/a ^(a)	n/a ^(a)	

Table 7.1-29: Deer Hunter and Harvest Data by Wildlife Management Unit (2016 to 2022)



Wildlife Management Units (WMU)	Year	Estimated Active Resident Deer Hunters	Estimated Total Deer Harvest by Resident Hunters
WMU 11C	2018	n/a ^(a)	n/a ^(a)
WMU 11C	2019	n/a ^(a)	n/a ^(a)
WMU 11C	2020	n/a ^(a)	n/a ^(a)
WMU 11C	2021	n/a ^(a)	n/a ^(a)
WMU 11C	2022	n/a ^(a)	n/a ^(a)
WMU 12A	2016	102	10
WMU 12A	2017	100	0
WMU 12A	2018	29	0
WMU 12A	2019	43	1
WMU 12A	2020	41	5
WMU 12A	2021	42	1
WMU 12A	2022	23	1
WMU 12B	2016	447	74
WMU 12B	2017	538	76
WMU 12B	2018	374	36
WMU 12B	2019	370	89
WMU 12B	2020	374	71
WMU 12B	2021	313	70
WMU 12B	2022	269	42
WMU 13	2016	4,642	2,306
WMU 13	2017	4,391	2,323
WMU 13	2018	4,708	2,134
WMU 13	2019	3,482	1,698
WMU 13	2020	3,680	1,704
WMU 13	2021	3,239	1,474
WMU 13	2022	2659	942
WMU 15A	2016	48	0
WMU 15A	2017	73	0
WMU 15A	2018	73	0
WMU 15A	2019	48	6
WMU 15A	2020	62	0
WMU 15A	2021	49	1
WMU 15A	2022	36	2

Source: (MNRF 2022I).

Note: n/a = not available/not applicable; WMU = Wildlife Management Units.

a) The lands that make up WMU 11C are within Quetico Provincial Park. Sport hunting within WMU 11C is prohibited under the *Provincial Parks and Conservation Reserves Act, 2006.* Note that some exemptions exist for individuals exercising Indigenous and/or Aboriginal treaty rights.



Bear Harvest Data

The estimated number of resident bear hunters active in the WMUs overlapped by the LSA increased (62.9%) from 2021 to 2022, where the number of hunters increased from 1,025 individuals to 1,670 individuals. The trend regarding the number of estimated total bear harvested also increased from 206 to 508, representing an increase of 181.6% for the same period of time (MNRF 2022a).

The estimated number of resident bear hunters active in the WMUs overlapped by the LSA declined from 2016 to 2022, where the number of hunters decreased from 2,078 individuals to 1,670 individuals (-19.63%). The trend regarding the number of estimated total bear harvested also declined from 1,021 individuals to 580 individuals, representing a decrease of 43.19% for the same period of time (MNRF 2022a).

In 2022, hunters were most active in WMUs 5 (404 hunters), WMU 8 (144 hunters), WMU 12B (155 hunters), WMU 13 (551 hunters), and WMU 15A (213 hunters) (MNRF 2022a). The largest harvests were consistently gathered from WMUs 5 (175 bears), WMU 8 (55 bears) and, WMU 12B (42 bears) WMU 13 (166 bears), and WMU 15A (66 bears) (MNRF 2022a).

There are 50 BMAs covering 364,712.0 ha in the LSA (MNRF 2022h). Publicly available harvest data for bears in the LSA are presented in Table 7.1-30.

Wildlife Management Units (WMU)	Year	Resident and Non-Resident Bear Hunters	Bear Harvest
WMU 5	2016	496	288
WMU 5	2017	475	267
WMU 5	2018	525	289
WMU 5	2019	533	263
WMU 5	2020	153	44
WMU 5	2021	133	28
WMU 5	2022	404	175
WMU 8	2016	190	98
WMU 8	2017	165	87
WMU 8	2018	173	77
WMU 8	2019	190	91
WMU 8	2020	85	23
WMU 8	2021	93	23
WMU 8	2022	144	55
WMU 9A	2016	131	75
WMU 9A	2017	139	66
WMU 9A	2018	124	74
WMU 9A	2019	123	59

Table 7.1-30: Bear Hunters and Harvest by Wildlife Management Unit (2016 to 2022)



Wildlife Management	Year	Resident and Non-Resident Bear	Bear Harvest
		Hunters	
WMU 9A	2020	19	4
WMU 9A	2021	22	2
WMU 9A	2022	65	26
WMU 11A	2016	55	32
WMU 11A	2017	55	27
WMU 11A	2018	83	33
WMU 11A	2019	77	32
WMU 11A	2020	8	3
WMU 11A	2021	23	0
WMU 11A	2022	62	19
WMU 11B	2016	49	8
WMU 11B	2017	34	13
WMU 11B	2018	47	3
WMU 11B	2019	36	3
WMU 11B	2020	43	4
WMU 11B	2021	29	2
WMU 11B	2022	23	5
WMU 11C	2016	n/a ^(a)	n/a ^(a)
WMU 11C	2017	n/a ^(a)	n/a ^(a)
WMU 11C	2018	n/a ^(a)	n/a ^(a)
WMU 11C	2019	n/a ^(a)	n/a ^(a)
WMU 11C	2020	n/a ^(a)	n/a ^(a)
WMU 11C	2021	n/a ^(a)	n/a ^(a)
WMU 11C	2022	n/a ^(a)	n/a ^(a)
WMU 12A	2016	54	18
WMU 12A	2017	106	47
WMU 12A	2018	59	15
WMU 12A	2019	72	28
WMU 12A	2020	59	7
WMU 12A	2021	40	4
WMU 12A	2022	54	26
WMU 12B	2016	258	102
WMU 12B	2017	234	68
WMU 12B	2018	219	83
WMU 12B	2019	271	87
WMU 12B	2020	137	18
WMU 12B	2021	114	14



Wildlife Management Units (WMU)	Year	Resident and Non-Resident Bear Hunters	Bear Harvest
WMU 12B	2022	155	42
WMU 13	2016	524	232
WMU 13	2017	519	191
WMU 13	2018	494	141
WMU 13	2019	542	194
WMU 13	2020	522	159
WMU 13	2021	450	126
WMU 13	2022	551	166
WMU 15A	2016	321	168
WMU 15A	2017	309	120
WMU 15A	2018	271	107
WMU 15A	2019	300	144
WMU 15A	2020	141	29
WMU 15A	2021	121	7
WMU 15A	2022	212	66

Source: (MNRF 2022a)

Note: n/a = not available/not applicable MNRF; WMU = Wildlife Management Units.

a) The lands that make up WMU 11C are within Quetico Provincial Park. Sport hunting within WMU 11C is prohibited under the *Provincial Parks and Conservation Reserves Act, 2006*. Note that some exemptions exist for individuals exercising Indigenous and/or Aboriginal treaty rights.

7.1.7.6.3 Trapping Activities in the Study Areas

Traplines may be located on private or Crown lands that are used by trappers licensed by the MNRF to harvest furbearing mammals for commercial or personal use. Trappers licensed by MNRF harvest a variety of animals including beaver, muskrat, river otter, fisher, pine marten, mink, weasel, raccoon (*Procyon lotor*), skunk (*Mephitidae sp.*), opossum (*Didelphidae sp.*), red squirrel, Canada lynx, bobcat (*Lynx rufus*), wolf, and coyote. In Ontario, the MNRF works with trappers to protect wildlife populations and habitat by managing wildlife populations, support conservation through licence fees and royalties from pelt sales, reduce conflicts between humans and wildlife (by removing/deterring problem animals), and by collecting harvest information from trappers who utilize traplines that provide critical information on animal populations throughout the province (MNRF 2022m).

The Fur Institute of Canada coordinates trap-testing across Canada to ensure traps meet humane-trapping standards as part of Canada's support of the Agreement on International Humane Trapping Standards. Additional information on trapping standards and guidelines is available from MNRF (MNRF 2022m).



7.1.7.6.4 Trapping Activities in the Study Areas

Traplines may be located on private or Crown lands that are used by trappers licensed by the MNRF to harvest furbearing mammals for commercial or personal use. Trappers licensed by MNRF harvest a variety of animals including beaver, muskrat, river otter, fisher, pine marten, mink, weasel, raccoon (*Procyon lotor*), skunk (*Mephitidae sp.*), opossum (*Didelphidae sp.*), red squirrel, Canada lynx, bobcat (*Lynx rufus*), wolf, and coyote. In Ontario, the MNRF works with trappers to protect wildlife populations and habitat by managing wildlife populations, support conservation through licence fees and royalties from pelt sales, reduce conflicts between humans and wildlife (by removing/deterring problem animals), and by collecting harvest information from trappers who utilize traplines that provide critical information on animal populations throughout the province (MNRF 2022m).

The Fur Institute of Canada coordinates trap-testing across Canada to ensure traps meet humane-trapping standards as part of Canada's support of the Agreement on International Humane Trapping Standards. Additional information on trapping standards and guidelines is available from MNRF (MNRF 2022m).

Based on information available from the MNRF:

- There are approximately 28 trapping licenses (regular registered licenses) and 20 structures located within the 46 trapline licence areas in the Project footprint;
- 38 trapping licenses (regular registered licenses) and 25 structures located within the 56 trapline license areas in the LSA; and
- 44 trapping licenses (regular registered licenses) and 26 structures located within the 66 trapline license areas in the RSA. (MNRF 2022h).

The total area of trapline license areas intersected is equal to 4,758.3 ha for the Project footprint, 412,258.5 ha for the LSA and 689,409.0.4 ha of the RSA (MNRF 2022h). Information provided by MNRF did not identify additional details related to the type and/or description of structures located within the trapline license areas detailed above.

Table 7.1-31 presents a summary of data for trapline license areas in the Project footprint, LSA and RSA including the total trapline license area overlapped, number of structures located within the trapline license areas, and number of trapping licensed identified by MNRF. The MNRF does not make individual trapline tenure or harvest information publicly available. Information regarding exact proximity of individual traplines to the Project footprint and ROW have been excluded for privacy purposes.



Table 7.1-51. Trapline License Areas in the Study Areas									
	Trapline License Area Data in the Project Footprint	Trapline License Area Data in the LSA	Trapline License Area Data in the RSA						
Total Trapline License Area (ha)	4,758.3	412,258.5	698,409.0						
Number of Structures Identified by MNRF (#)	20	25	26						
Number of Trapping Licenses Identified by MNRF (#)	28	38	44						
Trapline License	 TB046 	 TB046 	• TB046						
Areas Overlapped	• TB031	• TB031	• TB031						
	• TB149	• TB149	• TB149						
	 AT028 	 AT028 	 AT028 						
	• AT047	• AT047	• AT047						
	• TB101	• TB101	• TB101						
	• IG033	• TB128	• FF053						
	• TB154	• TB059	• TB128						
	• IG035	• IG033	• TB059						
	• TB087	 AT048 	• IG033						
	• AT043	• TB154	• AT048						
	• IG050	• IG035	• TB132						
	• IG051	• TB087	• TB154						
	• IG036	• AT043	• IG035						
	• TB131	• IG050	• IG221						
	• AT046	• IG051	• TB087						
	 IG053 	 IG036 	• AT043						
	• TB017	• TB131	• IG050						
	 AT026 	• AT046	 IG051 						
	• IG054	• IG053	• IG036						
	• DR023	• TB017	• TB131						
	• TB066	• AT026	• AT046						
	 DR027 	• IG054	• IG053						
	 DR024 	 DR023 	• TB017						
	 DR022 	• TB066	• AT026						
	• AT025	 DR027 	• IG057						

Table 7.1-31: Trapline License Areas in the Study Areas



Trapline License Area Data in the Project Footprint	Trapline License Area Data in the LSA	Trapline License Area Data in the RSA
• TB064	• DR024	• IG054
• DR021	• TB172	 DR010
 DR028 	 DR022 	 DR023
• TB113	• AT025	 DR044
• TB033	• TB064	 DR011
• AT039	 DR021 	• TB066
 DR026 	 DR028 	 DR027
• AT002	• TB129	 DR024
• TB151	• TB113	• TB172
• AT032	• TB033	 DR022
• IG055	• AT039	• AT025
• TB048	 DR026 	• TB064
• AT036	• TB148	 DR021
• TB100	• AT002	 DR028
• IG052	• TB151	• TB129
• TB115	• AT032	• TB113
• TB114	• AT029	• TB033
• IG034	• IG055	• FF054
• TB150	 TB048 	• AT039
 DR029 	• AT036	 DR026
	• TB100	• TB148
	 IG052 	• AT002
	• TB115	• TB151
	• TB114	• AT035
	• IG034	• AT032
	• TB150	• AT029
	• AT049	• IG055
	• DR029	• TB048
	• TB153	• AT036
	• AT030	• TB100
		• IG052
		• TB115
		• AT041
		• TB114
		• IG034



Trapline License Area Data in the Project Footprint	Trapline License Area Data in the LSA	Trapline License Area Data in the RSA
		• TB150
		• AT049
		 DR029
		• TB153
		• AT030

Source: (MNRF 2022h).

Note: # = number; ha = hectare; LSA = Local Study Area; RSA= Regional Study Area

7.1.7.6.5 Fishing Activities in the Study Areas

Within the Project footprint, there are 42 Bait Harvest Areas (BHAs) (5,123.7 ha), no aquatic access points, one fish sanctuary (0.6 ha) and six trout-baring lakes (6.5 ha). Trout-bearing lakes in the Project footprint include Balmoral Lake, Crowrock Lake, Elsie Lake, Forsberg Lake, Mabel Lake, and Nym Lake. Bait harvesters and trappers maintain three boat caches for resource harvest in the LSA. Fish sanctuaries in the Project footprint include Crowrock Lake (MNRF 2022h).

Within the LSA there are 59 BHAs (447,943.8 ha), 45 fishing access points, five fish sanctuaries (3,163.0 ha), and 59 trout-bearing lakes (33,968.1 ha) (MNRF 2022h).

- The 45 fishing access points in the LSA include: Lake #400316037, Aramis Lake, Clearwater West Lake, Crystal Lake, Dashwa Lake, East Wabigoon River, Eva Lake, Eye Lake (two access points), Far Lake, Finlayson Falls, Finlayson Lake (two access points), Hawk Lake, Hazelwood Lake, Hebden Brook, Huronian Lake, Icy Lake, Jackfish Lake, Kabaigon Lake, Kam River at Silver Falls Road (three access points), Kashabowie Lake, Long Lake (two access points), Lower Shebandowan Lake, Marmion Lake, Melgund Lake South, Middle Shebandowan Lake, Nickleby Lake, Nora Lake, Nugget Creek, Nym Lake, Plateau Lake, Rice Lake, Sapawe Lake, Shafton Lake, Swamp River, Turtle Lake (two access points), Upper Shebandowan Lake, Wabigoon Lake, Whitefish Lake, and Windigoostigwan Lake (MNRF 2022h).
- Fish sanctuaries in the LSA include: Cristie Island, Nugget Creek, Wabigoon River, environmentally sensitive areas (MNRF 2022h).
- Trout-bearing lakes in the LSA include: Campus Lake, Below Bow Lake, Clearwater West Lake, Como Lake, Burchell Lake, Balmoral Lake, Dimple Lake, Fish Lake, Ford Lake, Ghost Lake, Horseshoe Lake, Kinmoapiku Lake, Little Raleigh Lake, Lower Moosehide Lake, Namaygoos Lake, Nora Lake, Popeye Lake, Raleigh Lake, Thunder Lake, Upper Moosehide Lake, Valjean Lake, Crowrock Lake, Crystal Lake, Dashwa Lake, East Hardtack Lake, Elsie Lake, Eva Lake, Eye Lake, Forsberg Lake, French Lake, Grey Trout Lake, Hardtack Lake, Herb Lake, Mabel Lake, Marion Lake, Niobe



Lake, Nydia Lake, Nym Lake, Pickerel Lake, Sandford Lake, Turtle Lake, Walt Lake, Wasp Lake, White Otter Lake, Windigoostigwan Lake, Greenwater Lake, Huronian Lake, Kashabowie Lake, Rudge Lake, Stetham Lake, Tilly Lake, Upper Shebandowan Lake and other unnamed lakes (MNRF 2022h).

Within the RSA there are 83 BHAs (767,574.7 ha), 69 fishing access points, six fish sanctuaries (5,466.3 ha), and 90 trout-bearing lakes (55,930.0 ha) (MNRF 2022h).

- The 69 aquatic access points in the RSA include access points to: Lake # 40017761, Lake #400316037, Aramis Lake, Athelstane Creek, Avery Lake, Bass Lake, Burchell Lake, Clearwater West Lake, Crooked Pine Lake, Crystal Lake, Dashwa Lake Drift Lake, East Wabigoon River, Eva Lake, Eye Lake (two access points), Far Lake, Finlayson Falls, Finlayson Lake (two access points), Ghost Lake, Greenpike Lake, Hawk Lake, Hazelwood Lake, Huronian Lake, Hebden Brook, Huronian Lake, Icy Lake, Jackfish Lake, Kabaigon Lake, Kaministiquia River at Silver Falls Road (three access points), Kashabowie Lake, Kawene Lake, Knight Lake, Lerome Lake, Little Athelstane Lake, Little Dog Lake, Long Lake (two access points), Lower Seine Bay, Lower Shebandowan Lake, Marmion Lake, Matawin River – Upper Falls, McGraw Dam, Melgund Lake North and South, Middle Shebandowan Lake, Nickelby Lake, Nora Lake, Nugget Creek, Paddy Lake (two access points), Plateau Lake, Rice Lake, Sapawe Lake (two access points), Shafton Lake, Surprise Lake, Swamp River, Turtle Lake (two access points), Upper Shebandowan Lake, Wabigoon Lake, Whitefish Lake, Williamson Lake, and Windigoostigwan Lake (two access points) (MNRF 2022h).
- Fish sanctuaries in the RSA include: Cristie Island, Nugget Creek, Wabigoon River, and environmentally sensitive areas (MNRF 2022h).
- Trout-bearing lakes include: Campus Lake, Below Bow Lake, Bethune Lake, Clearwater • West Lake, Como Lake, Burchell Lake, Balmoral Lake, Dibble Lake, Dimple Lake, Fish Lake, Ford Lake, Ghost Lake, Gullwing Lake, Horseshoe Lake, Kinmoapiku Lake, Little Raleigh Lake, Lower Moosehide Lake, Mameigwess Lake, Namaygoos Lake, Nora Lake, Paddy Lake, Popeye Lake, Raleigh Lake, Spruce Lake, Thunder Lake, Upper Moosehide Lake, Valjean Lake, Abbess Lake, Batchewaung Lake, Crook Lake, Crowrock Lake, Crystal Lake, Dashwa Lake, Dovetail Lake, Dragon Lake, East Hardtack Lake, Elbow Lake, Elsie Lake, Eva Lake, Eye Lake, Forsberg Lake, French Lake, Grey Trout Lake, Hardtack Lake, Herb Lake, Irene Lake, Jackfish Lake, Jim Lake, Little Grey Trout Lake, Little Gull Lake, Little Irene Lake, Little Sandford Lake, Mabel Lake, Marion Lake, Mount Lake, Nevison Lake, Niobe Lake, Nydia Lake, Nym Lake, Pickerel Lake, Sandbeach Lake, Sandford Lake, Turtle Lake, Walt Lake, Wasp Lake, White Otter Lake, Windigoostigwan Lake, Baril Lake, Fork Lake, Greenwater Lake, Huronian Lake, Kashabowie Lake, Loch ErneRudge Lake, Stetham Lake, Tilly Lake, Upper Shebandowan Lake, Serpent Lake, Sanctuary Lake and other unnamed lakes (MNRF 2022h).



Fish Management Zones

There are four fish management zones that intersect the LSA and RSA and in which harvesting activities take place: FMZ 4, FMZ 5, FMZ 6, and FMZ 9 (Table 7.1-32 and Figure 7.1-7) (MNRF 2022h).

FMZs 4, 5, and 6 are located, in part, within the Project footprint. FMZ 5 has the largest amount of land in the Project footprint (2,863.5 ha), while FMZ 6 has 1,866.9 ha in the Project footprint, and FMZ 4 has 394.1 ha. FMZ 9 had no land in the Project footprint; however, part of this FMZ overlaps the LSA and RSA. The amount of land intersected by the Project footprint does not exceed 1% of the total size for any of the FMZs identified (MNRF 2022h). The total area of lands for FMZs that intersect the Project is detailed and displayed in Table 7.1-32 and Figure 7.1-7. The FMZs intersected by the Project are described below.

- FMZ 4 (Northwest Region: Kenora, Red Lake, Dryden, Sioux Lookout, Thunder Bay):
 - FMZ 4 is approximately 6,047,285 ha, of which less than 25% is privately owned. Lakes within this FMZ are of intermediate depth and stained water clarity. The FMZ has an abundant and wide range of aquatic habitats in its numerous lakes and of rivers, which create important recreational, commercial, and tourism-based fisheries. Fisheries on seven large lakes, including Red Lake Gullrock Lake, Lac Seul, Minnitaki Lake, Abram Lake, Pelican Lake and Botsford Lake and Big Vermillion Lake which are designated by MNRF as 'Specially Designated Waters,' allowing for the development of specific management objectives in recognition the social and economic importance of these waterbodies. Prominent fisheries in this FMZ include northern pike, walleye, lake trout, lake whitefish, smallmouth bass, and muskellunge (*Esox masquinongy*). brook trout (*Salvelinus fontinalis*), rainbow trout (*Oncorhynchus mykiss*) and splake (*Salvelinus fontinalis* × *Salvelinus namaycush*) are also stocked in many of the zone's lakes to create additional fishing opportunities (MNRF 2021b).
 - Road access to the fisheries of FMZ 4 is greatest in the south with road density decreasing towards the north. There are large remote regions that are primarily accessed by air and used by the fly in fishing tourism. Major highways that provide primary access include Highways 17, 105, 72, and 599. Over 28,000 km of roads extend from these main corridors, most of which were built to provide access for forest management companies, but now also provide anglers with more direct routes to fishing opportunities (MNRF 2021b).

• FMZ 5 (Northwest Region: Fort Frances, Kenora and Dryden):

• FMZ 5 is approximately 4,463,062 ha of which over 90% is Crown land. Lakes in FMZ 5 are typically deep and clear and the landscape is dominated by bedrock (over 70% of the land area). FMZ 5 has abundant and wide-ranging aquatic habitats, with many popular waterbodies including Rainy Lake, Rainy River, Lake of the Woods, Shoal Lake, Eagle Lake, Wabigoon Lake, Dinorwic Lake and the Winnipeg River



system. More than 23% of the FMZs total area is covered in permanent water that creates important recreational, commercial, and tourism-based fisheries. Prominent fisheries in this FMZ include northern pike, walleye, lake trout, smallmouth bass, and yellow perch, while other sport fish species include muskellunge, sauger (*Sander canadensis*), largemouth bass (*Micropterus salmoides*), lake whitefish and black crappie (*Pomoxis nigromaculatus*), lake trout, northern pike, smallmouth bass, lake whitefish, and muskellunge. Species at Risk, including lake sturgeon (*Acipenser fulvescens*) and shortjaw cisco (*Coregonus zenithicus*), are also found in FMZ5 (MNRF 2021c).

 Road access to FMZ 5 is well distributed throughout the zone and the FMZ has a well-developed fly-in tourism industry with areas that are primarily accessed by air. Major highways that provide access to the FMZ include Highways 11, 17, 502, 71 and 622. Over 2,400 lakes are currently within 500 m of a road, so use of a large majority of lakes within this FMZ is accessible by anglers or other resource users (MNRF 2021c).

• FMZ 6 (Northwest Region: Thunder Bay, Nipigon, Dryden)

- FMZ 6 is approximately 4,361,333 ha and encompasses a large portion of the MNRF administrative district of Thunder Bay, as well as smaller portions of the Nipigon and Dryden districts. Approximately half of the lakes in this FMZ are classified as cool water or cold-water lakes. FMZ 6 has abundant and wide-ranging habitats, with many popular waterbodies including three Specially Designated Waters that are Lake Nipigon, Lac des Mille Lacs, and Whitefish Lake. Prominent fisheries in this FMZ include walleye, northern pike, brook trout, lake trout, lake whitefish, lake herring, yellow perch, smallmouth bass, and lake sturgeon. Rainbow trout and splake are stocked in many lakes for additional angling opportunities, and rainbow trout, chinook salmon (Oncorhynchus tshawytscha), pink salmon (Oncorhynchus gorbuscha) and coho salmon (Oncorhynchus kisutch) utilize rivers in the FMZ that flow into Lake Superior (MNRF 2009).
- FMZ 6 is well accessed in the southern portions near the City of Thunder Bay, but access decreases from the south to the north (MNRF 2009).

A description of the overlap of the Project footprint, LSA and RSA for the Project with provincial FMZs is presented in Table 7.1-32.



Fisheries Management Zone (FMZ)	Area of FMZ in the Project Footprint (ha)	% of Total FMZ in the Project Footprint	Area of FMZ in the LSA (ha)	% of Total FMZ in the LSA	Area of FMZ in the RSA (ha)	% of Total FMZ in the RSA
4	394.1	<0.1%	37,847.5	<0.1%	70,232.1	1.2%
5	2,863.5	<0.1%	265,206.1	<0.1%	452,326.5	10.1%
6	1,866.9	<0.1%	154,689.8	<0.1%	272,445.4	6.2%
9	0	0	3,127.7	<0.1%	11,517.0	0.4%

 Table 7.1-32:
 Fisheries Management Zones in the Study Areas

Source: (MNRF 2009; MNRF 2021b; MNRF 2021c).

Note: Some of the numbers are rounded for presentation purposes. Therefore, it may appear that the totals do not equal the sum of the individual values.

FMZ = Fisheries Management Zone; ha = hectare; LSA = Local Study Area; RSA = Regional Study Area; % = percent; < = less than.

As with other harvesting activities, the MNRF regulates fishing by establishing permitted seasons and limits for each FMZ. The 2021 open fishing seasons identified that some fish species can be harvested all year, while the harvesting of other species faces greater restrictions dependent on the FMZ management guidelines (Table 7.1-33). Fishing seasons influence levels of fishing activity in the Project footprint and LSA. Unlike hunting seasons, open fishing seasons are not separated by 'resident' and 'non-resident' anglers and apply to both recreational and commercial tourism-related fishing.

Fishing is not permitted from April 1 to June 14 for fish sanctuaries described above including Cristie Island, Crowrock Lake Nugget Creek, Wabigoon River, and White Otter Lake (MNRF 2023f). This includes:

- Crowrock Lake upstream from the narrows at 49°00'00" N, 91°43'50'W;
- The waters of that part of Wabigoon Lake in the geographic Township of Zealand in the Territorial District of Kenora extending from the shoreline of Christie Island to a distance of 100 m;
- The waters of that part of Nugget Creek in the geographic Township of Zealand in the Territorial District of Kenora lying between the confluence of Hughes Creek and Nugget Creek and the Canadian Pacific Railway crossing at the mouth of Nugget Creek at Wabigoon Lake.
- The waters of that part of Nugget Creek in the geographic Township of Zealand in the Territorial District of Kenora lying between the confluence of Hughes Creek and Nugget Creek and the Canadian Pacific Railway crossing at the mouth of Nugget Creek at Wabigoon Lake; and



 The waters that make up White Otter Lake in the Turtle River – White Otter Lake Provincial Park (MNRF 2023f).

Table 7.1-33: Fishing Seasons by Fisheries Management Zone, 2021 to 2022

Fish Species	Open Fishing Season for FMZ 4	Open Fishing Season for FMZ 5	Open Fishing Season for FMZ 6
Atlantic Salmon	n/a	n/a	Open all year
Brook Trout	Jan. 1 to Labour Day	Open all year	4 th Saturday in April to Labour Day
Brown Trout	n/a	n/a	Open all year
Channel Catfish	n/a	n/a	Open all year
Crappie	Open al year	Open all year	Open all year
Lake Sturgeon	Closed all year	Closed all year	Closed all year
Lake Trout	Jan. 1 to Sept. 30	Jan. 1 to Sept. 30	Jan. 1 to Sept. 30
Lake Whitefish	Open all year	Open all year	Open all year
Largemouth and Smallmouth Bass	Open all year	Open all year	Open all year
Muskellunge	3 rd Sat. in June to Dec. 15	3 rd Sat. in June to Dec. 15	3 rd Sat. in June to Dec. 15
Northern Pike	Open all year	Open all year	Open all year
Pacific Salmon	n/a	n/a	Open all year
Rainbow Trout	Open all year	Open all year	Open all year
Splake	Open all year	Open all year	Open all year
Sunfish	Open all year	Open all year	Open all year
Walleye and Sauger	Jan. 1 to Apr. 14, 3rd Sat. in May to Dec. 31	Jan. 1 to Apr. 14, 3rd Sat. in May to Dec. 31	Jan. 1 to Apr. 14, 3rd Sat. in May to Dec. 31
Yellow Perch	Open all year	Open all year	Open all year

Source: (MNRF 2009; MNRF 2021b; MNRF 2021c; MNRF 2023f).

Note: FMZ = Fisheries Management Zone; n/a = not applicable.

1) According to MNRF Atlantic Salmon, Brook Trout, Channel Catfish and Pacific Salmon are not present in FMZ 4 and FMZ 5.

7.1.7.7 Recreation and Commercial Tourism

7.1.7.7.1 Regulatory Context and Overview

Other recreational and commercial outdoor tourism refers to recreational and touristic land use that is not related to the harvesting of natural resources which may take place on private, public, and/or Crown lands in the Project study areas. These types of land uses include (but are not limited to) terrestrial activities such as hiking, ATVing, snowmobiling, nature viewing and cycling on regional trails, and aquatic activities such as boating, canoeing, and kayaking. Note that



additional details about boating, canoeing, and kayaking are presented in Section 7.1.7.8 (Navigation).

Northwestern Ontario maintains an active outdoor tourism and recreation land use culture. The Project falls within MTCS' Regional Tourism Organization (RTO) 13c. In 2019, approximately 492,485 visitors travelled to RTO 13c to access outdoor sports and activities. Approximately 227,973 visitors travelled to access regional boating opportunities, 197,727 accessed fishing opportunities, 174,879 accessed camping opportunities, 144,641 participated in nature viewing, 125,506 accessed canoeing opportunities, 121,775 took advantage of hiking opportunities and 112,971 visited beaches (MTCS 2022). Regional residents also take advantage of the recreational resources in the RSA. Both residents and visitors enjoy the use of local camps, cabins, and cottages in addition to their primary residences and private land which may be utilized for recreational and tourism activities.

Non-consumptive tourism and recreational land and resource uses (e.g., the use of trailheads and trails, aquatic, and motorized recreation) are managed through a combination of federal and provincial bodies under existing legal and regulatory frameworks, as well as private recreationalist and commercial tourism organizations (e.g., snowmobile associations).Non-consumptive tourism and recreational land and resource uses may also be managed by private landowners in instances where individuals possess land that might be utilized for purposes described below including use of cabins, camps, cottages, stables, and recreational trails.

Trails and trailheads are regulated under various legislative requirements and governmental bodies, which are dependent on their location. Trails and trailheads within provincial parks are regulated and maintained under the *Provincial Parks and Conservation Reserves Act, 2006*. Subsection 3.3(1) of the Act states that the superintendent, district conservation manager or conservation reserve manager in charge of a provincial park or conservation reserve may open or close travel on any trail or portage through these protected areas (*Provincial Parks and Conservation Reserves Act 2006*). The *Planning Act* also provides tools for the identification and protection of the province's trails for provincial and municipal authorities (*Planning Act 1990*).

With respect to motorized recreation (e.g., snowmobile and ATV use), users are subject to the *Off-Road Vehicles Act*, which outlines conditions for safe and acceptable recreational use (e.g., permits required, age requirements, careless driving, and landowner rights) (*Off-Road Vehicles Act* 2019). Additional requirements for riding snowmobiles and ATVs on Ontario's highway network are captured in the *Highway Traffic Act* (*Highway Traffic Act*, 1990). Valid Ontario drivers' licences are required to drive snowmobiles in the province (MTO 2022). The Ontario Federation of All-Terrain Vehicle Clubs (OFATV) is a not-for-profit volunteer-driven association that provides responsible, safe, legal, and environmentally-friendly trails, for riding ATVs in the Province of Ontario (OFATV 2022).

Snowmobiling activities in Ontario are formally organized through the Ontario Federation of Snowmobile Clubs (OFSC), a volunteer, non-profit organization that manages snowmobile trails



across the province. The OFSC and local snowmobile club volunteers maintain the trails for visiting OFSC members. The status and safety of snowmobile trails is monitored and reported for users throughout the season through the OFSC website (OFSC 2022b).

7.1.7.7.2 Recreation and Tourism Activities in the Study Areas

This section presents details about the recreation and commercial tourism features and activities present within the Project footprint, LSA, and RSA, including recreational trail usage, aquatic recreation (i.e., canoeing, kayaking, and boating), motorized recreation, camp, cabin, and cottage sites, tourist loges, lodges, camps, commercial tourism, amongst additional recreational infrastructure features found in the Project area. Table 7.1-34 provides a breakdown of data obtained from MNRF related to outdoor tourism and recreation in the Project footprint, LSA and RSA including types of tourism (i.e., trails, boat access points and canoe routes, camps, cabins, cottages, and campgrounds). The table notes features that transect the Project footprint and/or are overlapped by the LSA or RSA.

The data captured by MNRF may not wholly represent the extent of activities which take place on private lands. Additional recreation and commercial tourism features/activities may be present in the Project footprint, LSA, and RSA (but located on land owned by private landowners). It is assumed that the recreation and commercial tourism features/activities outlined in Table 7.1-34, Section 7.1.7.7.2.1 (Recreational Trail Use), and Section 7.1.7.7.2.2 (Camping, Commercial Tourism, and Recreational Infrastructure) are likely to also take place on private lands.

Note that aquatic recreation in the form of canoeing, kayaking and boating in addressed under Section 7.1.9.8 (Navigation).






	Type of Outdoor Tourism and Recreation Features		Transected by the Project Footprint		Within the LSA		Within the RSA
•	 Tourism Establishment Areas including: Horse Riding Stable; Inn; Main Base Lodge; Outpost Camp; Outpost Camp; Commercial Campground; Commercial Parking Lot; Golf Course; Marina/Dock; Ski Hill (not remote); Shooting Range; and Tree tapping. 	•	 Yes, including features such as: Horse Riding Stable; Main Base Lodge; and Outpost Camp. 	•	 Yes, including features such as: Horse Riding Stable; Main Base Lodge; Outpost Camp; Commercial Campground; Commercial Parking Lot; Golf Course; Marina/Dock; and Ski Hill (not remote). 	•	 Yes, including features such as: Commercial Campground; Commercial Parking; Golf Course; Horse Riding Stable; Inn; Main Base Lodge; Outpost Camp; Ski Hill (not remote); Shooting Range; and Tree tapping.
•	Potential Tourism Area ^(a) .	•	N/A.	•	N/A.	•	N/A.
•	Ontario Trail Network (OTN) Trailheads.	•	No.	•	Yes.	•	Yes.
•	OTN trail segments including the following types of trails:	•	 Yes, including the following trail types: Hiking or Walking, Cycling, Cross Country Skiing; Hiking or Walking, Cycling, Cross Country Skiing, Equestrian; Paddling; and Paddling, Portage. 	•	Yes, including the following trail types:	•	Yes, including the following trail types:

Table 7.1-34: Outdoor Tourism and Recreation Features in the Study Areas







Type of Outdoor Tourism and Recreation Features	Transected by the Project Footprint	Within the LSA	Within the RSA
 Hiking or Walking; 	-	 Hiking or Walking; 	 Hiking or Walking;
 Hiking or Walking,		 Hiking or Walking,	 Hiking or Walking,
Cycling;		Cycling;	Cycling;
 Hiking or Walking,		 Hiking or Walking,	 Hiking or Walking,
Cycling, Cross Country		Cycling, Cross Country	Cycling, Cross Country
Skiing;		Skiing;	Skiing;
 Hiking or Walking,		 Hiking or Walking,	 Hiking or Walking,
Cycling, Cross Country		Cycling, Cross Country	Cycling, Cross Country
Skiing, Equestrian;		Skiing, Equestrian;	Skiing, Equestrian;
 Hiking or Walking,		 Hiking or Walking,	 Hiking or Walking,
Cycling, Paddling;		Cycling, Paddling;	Cycling, Paddling;
 Hiking or Walking,		 Hiking or Walking,	 Hiking or Walking,
Cycling, Snowshoeing,		Cycling, Snowshoeing,	Cycling, Snowshoeing,
Paddling;		Paddling;	Paddling;
 Hiking or Walking, Cross		 Hiking or Walking, Cross	 Hiking or Walking, Cross
Country Skiing;		Country Skiing;	Country Skiing;
 Hiking or Walking,		 Hiking or Walking,	 Hiking or Walking,
Snowshoeing		Snowshoeing	Snowshoeing
 Cross Country Skiing; 		 Cross Country Skiing; 	 Cross Country Skiing;
 Paddling; 		 Paddling; 	 Paddling;
 Paddling, Portage; and 		 Paddling, Portage; and 	 Paddling, Portage; and
 Portage. 		 Portage. 	 Portage.





Type of Outdoor Tourism and Recreation Features	Transected by the Project Footprint	Within the LSA	Within the RSA
 Non-OTN Trail segments including the following types of trails: Hike; Hike, Skiing; Hike, Snowshoeing; Bike; Skiing; Snowmobile; Portage; Snowmobile, Portage; Snowmobile, Resource User; Canoe Route; Path of the Paddle Trail; Portage; Portage, Hike; Portage, Hike, Ski; Portage, Resource User; and Resource User; and Other^(c). 	 Yes, including the following trail types: Bike; Canoe Route; Hike; Portage; Resource User; Ski; Snowmobile; Snowmobile, Portage; and Snowmobile, Resource User; and Other^(c). 	 Yes, including the following trail types: Hike; Hike, Skiing; Hike, Snowshoeing; Bike; Skiing; Snowmobile; Snowmobile, Portage; Snowmobile, Resource User; Canoe Route; Path of the Paddle Trail; Portage; Portage, Hike; Portage, Hike, Ski; Portage, Resource User; Resource User and Other^(c). 	 Yes, including the following trail types: Hike; Hike, Skiing; Hike, Snowshoeing; Bike; Skiing; Snowmobile; Snowmobile, Portage; Snowmobile, Resource User; Canoe Route; Path of the Paddle Trail; Portage; Portage, Hike; Portage, Hike, Ski; Portage, Resource User; Resource User and Other^(c).
 Aquatic Access Points^(d) 	• No.	 Yes, including those listed in Section 7.1.7.6.5^(b). 	 Yes, including those listed in Section 7.1.7.6.5^(b).



Type of Outdoor Tourism and Recreation Features	Transected by the Project Footprint	Within the LSA	Within the RSA
 Recreation Areas: Trail/recreational area access points; Commercial boat caches; Private boat caches; Resource harvest boat caches; Designated camping site; Picnic site; Youth camp; and Recreation camp. 	Designated camping site.	 Yes, including: Trail/recreational area access points; Commercial boat caches; Private boat caches; Resource harvest boat caches; Designated camping site; Picnic site; Youth camp; and Recreation camp. 	 Yes, including: Trail/recreational area access points; Commercial boat caches; Private boat caches; Resource harvest boat caches; Designated camping site; Picnic site; Youth camp; and Recreation camp.
 Residential and Cottage Sites^(e) Cottage site (not remote); Cottage site (remote); and Residential site (not remote). 	 Yes, including the following: Cottage site (not remote). 	 Yes, including the following: Cottage site (not remote); Cottage site (remote); and Residential site (not remote). 	 Yes, including the following: Cottage site (not remote); Cottage site (remote); and Residential site (not remote).

Source: (MNRF 2022h).

LSA = Local Study Area; N/A = Not Available; RSA = Regional Study Area.

Note: Quantitative assessment of change in area and access to recreational and commercial outdoor tourism features was completed by calculating the area affected by Project footprint, LSA, RSA and if possible, the number of affected features.

- a) Data for potential tourism areas was not available at the time of reporting.
- b) Details regarding aquatic access points for waterbodies in the RSA were not listed due to the large volume of information available. Additional detail regarding aquatic access points for waterbodies in the RSA are available from MNRF and in Section 7.1.7.6.5.
- c) Trails noted as "other" were not necessarily classified by MNRF.
- d) Aquatic access points are sites where anglers can access fishing locations, as defined by the MNRF.
- e) The number of recreational and cottage sites is based on data obtained from MNRF.



7.1.7.7.2.1 Recreational Trail Use

The MNRF LIO geospatial database identifies segments of the Ontario Trail Network (OTN) and non-Ontario Trail Network (non-OTN) trail segments and trailheads (Table 7.1-36 and Figure 7.1-8) for the Project study areas, distinguished by different features, structures or surfaces (MNRF 2022h; MNRF 2022i). The OTN is the result of a combined efforts of trail organizations and federal, provincial and municipal governments working to create a common and shared trail infrastructure of trails across Ontario. The OTN includes trails for hiking, walking, cycling, ATVs, equestrian riding, canoe, and portage and are located in natural or built-up environments (Ontario Trails 2022). The MNRF LIO geospatial database may not identify trail segments and trailheads that are present on lands owned by private landowners. Although these features are not explicitly defined by MNRF, they are likely utilized in the Project footprint, LSA, and RSA (as described in Section 7.1.7.2).

Numerous outdoor recreation clubs and tourism operators exist in the communities transected by the RSA, and whose services encourage opportunities for outdoor recreation and local trail use. Opportunities for motorized recreation occurs along formal and organized snowmobile and ATV trails maintained within the RSA. Recreation clubs, tourism operators, and snowmobile and ATV clubs who are active within the Project study areas include (but are not limited to):

Town of Atikokan

- Atikokan Equestrian Club;
- Atikokan Motorcross Club;
- Atikokan Mudslingers 4x4 Club;
- Atikokan Steep Rock Riders Mountain Bike Club;
- Atikokan Ski Club;
- · Beaten Path Nordic Cross Country Ski Club; and
- The Royal Canadian Legion Branch 145 ATV/UTV Club (Atikokan Economic Development Corporation 2022; Visit Atikokan n.d.).

City of Dryden

- Dryden Ghost Riders Mountain Bike Club;
- Dryden Saddle Club;
- Dryden Ski Club;
- Dryden Power Toboggan Club; and
- North Western Ontario Snowmobile Trails Association (City of Dryden, 2017; Sunset Country 2022).



• City of Thunder Bay

- Alpine Club of Canada;
- Blacksheep Mountain Bike Club;
- Big Thunder Nordic Ski Club;
- Bison Run Club;
- Lappe Nordic Ski Club;
- Norwesters Alpine Club;
- Thunder Bay Adventure Trails Snowmobile Club;
- Thunder Bay ATV Club
- Thunder Bay Cycling Club;
- Thunder Bay Freestyle Ski Club;
- Thunder Bay Hiking Association;
- Thunder Bay Trails Association; and
- Superior Dirt Riders (Northern Ontario Travel 2022; Ontario Ski Trails 2022; Visit Thunder Bay 2022).

Project Footprint

Based on available MNRF data the Project footprint transects seven OTN trails (for 3.1 km) and 105 non-OTN trails (for a combined 157.3 km). The majority of OTN trails in the Project footprint are for hiking or walking, cycling, cross country skiing (1.2 km) and paddling (1.1 km) trails, while the majority of non-OTN trails include snowmobile (47.1 km) and ski (5.8 km), bike (1.5 km), and snowmobile, resource user trails (28.2 km) (MNRF 2022i). Snowmobile trails in the Project footprint are managed by snowmobiling groups who are members of the OFSC (as described above). Canoe routes extending through Ontario Parks are managed by MECP within Provincial Parks and the MNRF. Approximately 71.4 km of non-OTN trails are defined as "other" in the Project footprint, where usage is undefined by MNRF (MNRF 2022i).

Portaging is considered to be an important element of guided outfitting services for hunting and fishing trips occurring in the LSA and RSA, as well as for non-consumptive recreational use. A breakdown of trail types in the Project footprint, LSA and RSA are provided in Table 7.1-35 and Table 7.1-36 for OTN and non-OTN trails, respectively.

Local Study Area

Based on available MNRF data, The LSA overlaps 28 OTN trails (for 745.1 km) and 570 non-OTN trails (for a combined 903.7 km). These trails include cross country skiing, hiking or walking, cycling, paddling/canoeing, snowshoeing, portaging, and equestrian activities, resource



activities, and snowmobiling. The majority of OTN trails in the LSA are hiking or walking, cycling, cross country skiing trails (191.9 km), paddling, portage trails (180.6 km) and paddling trails (160 km) while the majority of non-OTN trails include snowmobile trails (171.1 km), bike (48.3 km), ski (51.8 km), snowmobile/resource user (37.4 km), and resource user (35.1 km) trails (MNRF 2022i). Approximately 288 km of non-OTN trails are defined as "other" in the LSA, where usage is undefined by MNRF (MNRF 2022i).

Snowmobile clubs groom local snowmobile trails in the winter, brush portions of the trail in the summer, and maintain warm-up shacks for emergency use along trails. According to information obtained from the OFSC, the LSA falls within District 13 (northwestern Ontario) of the snowmobile trail network. OFSC has identified the presence of formally organized trails that connect Thunder Bay and Atikokan, and Atikokan to Dryden (through Ignace, Sioux Lookout and Big Vermillion Lake). Trail A, Trail A110M, Trail D110M and Trail L101 were identified for the Thunder Bay to Atikokan route and Trail A, Trail L903, L801, L701 and Trail D5 were identified for the Atikokan to Dryden route (OFSC 2022a). It is likely that off-trail, recreational snowmobiling takes place outside of the formally recognized OFSC trail system by local and regional snowmobiliers, given the popularity of the activity in northwestern Ontario. Recreational activities, including snowmobiling, are not permitted on Hydro One ROWs unless it is agreed to by the property owner and deemed compatible by Hydro One.

Regional Study Area

Based on available MNRF data, the RSA intersects 28 OTN trails (for 1,294.6 km) and 682 non-OTN trails (for a combined 1,199.1 km). These trails include cross country skiing, hiking, or walking, cycling, paddling/canoeing, snowshoeing, portaging, and equestrian activities, resource activities, and snowmobiling. The majority of OTN trails in the RSA are hiking or walking, cycling, cross country skiing (306.3 km), paddling, portage (429.7 km), paddling (344.1 km), and hiking or walking, cycling, snowshoeing, paddling (67.1km), while the majority of non-OTN trails include snowmobile trails (206.3 km), resource user (65.8 km), ski (55.3 km), and bike (53.3 km) trails (MNRF 2022i). Approximately 691.1 km of non-OTN trails are defined as "other" in the Project footprint, where usage is undefined by MNRF (MNRF 2022i).

The popularity of snowmobile touring has grown, with tourists from the United States taking longer trips through the region via snowmobile, in contrast to local users, who typically participate in day use (MTCS 2022).

ATV use and use of other off-road vehicles are equally as popular in the RSA and similar to snowmobiling, it is likely that undocumented, recreational off-road motorcycling takes place outside within the RSA by local and regional riders.



RED SKY MÉTI	S INDEPEND	INT NA

	PADDLING
_	EXISTING ACCESS ROAD - NO



CONSULTANT	YYYY-MM-DD	2023-10-30
	DESIGNED	NA
\\S D	PREPARED	DB
	REVIEWED	НК
	APPROVED	CS

PROJECT NO 2012772	D. CONTROL	REV.	FIGURE 7 1 0 1
2013/12	5 0030		1.1.0-1



- MNO COUNCIL OFFICE \bigcirc 230 KV TRANSFORMER STATION (TS)
- ACCESS POINT 0
- BOAT CACHE, COMMERCIAL 0
- CAMPING SITE \circ
- ___ EXISTING TRANSMISSION LINE
- -- -CROSS COUNTRY SKIING
- HIKING OR WALKING, CROSS COUNTRY - -- -SKIING
- HIKING OR WALKING, CROSS COUNTRY SKIING, SNOWSHOEING ----
- HIKING OR WALKING, CYCLING, CROSS COUNTRY SKIING
- HIKING OR WALKING, CYCLING, CROSS COUNTRY SKIING, EQUESTRIAN

HIKING OR WALKING, CYCLING, - -- -

- -- -

- SNOWSHOEING, PADDLING
-

HIKING OR WALKING, CYCLING,

PADDLING

- - PORTAGE
- ACCESS TRAIL
- BIKE TRAIL
- -CANOE ROUTE
- - HIKE
- - HIKE/SKI
- - PORTAGE

- PORTAGE/HIKE
- -PORTAGE/HIKE/SKI
- HIKING OR WALKING, SNOWSHOEING
- ---- PADDLING
- - PADDLING, PORTAGE
- HIKE/SNOWSHOE

- -RESOURCE USER
- -SKI
- SNOWMOBILE TRAIL - -
- SNOWMOBILE TRAIL / PORTAGE
- SNOWMOBILE TRAIL / RESOURCE USER
- EXISTING ACCESS ROAD NO IMPROVEMENTS REQUIRED
- EXISTING ACCESS ROAD POTENTIAL
- IMPROVEMENTS NEW ACCESS ROAD - PREFERRED
- NEW ACCESS ROAD ALTERNATE
- PREFERRED ROUTE TRANSMISSION LINE RIGHT-OF-WAY

- D26A / F25A CIRCUIT SEPARATION
- AGGREGATE SITE
- ~~~~ FLY YARD CAMP / LAYDOWN
- LOCAL STUDY AREA
- REGIONAL STUDY AREA
- MAIN BASE LODGE
- MARINA/DOCK
- OUTPOST CAMP
- SKI HILL, NOT REMOTE RECREATION CAMP
- YOUTH CAMP
- COTTAGE SITE, NOT REMOTE
- COTTAGE SITE, REMOTE



CLIENT HYDRO ONE NETWORKS INC.

CONSULTANT	YYYY-MM-DD	2023-10-30
wsp	DESIGNED	NA
	PREPARED	DB
	REVIEWED	НК
	APPROVED	CS

REFERENCE(S) BASE DATA COURTESY OF LAND INFORMATION ONTARIO MNRF. IMAGERY COPYRIGHT © ESRI AND ITS LICENSORS. USED UNDER LICENSE, ALL RIGHTS RESERVED. PROJECTION: NAD 1983 CSRS UTM ZONE 15N

PROJECT

WAASIGAN TRANSMISSION LINE

TITLE OUTDOOR TOURISM AND RECREATIONAL LAND USE IN THE STUDY AREAS PROJECT NO. CONTROL REV. FIGURE 20137728 0030 7.1.8-2 1



LEGEND

- MNO COUNCIL OFFICE
- 230 KV TRANSFORMER STATION (TS)ACCESS POINT
- ACCESS POINTBOAT CACHE, COMMERCIAL
- O BOAT CACHE, RESOURCE HARVEST
- CAMPING SITE
- PICNIC SITE
- EXISTING TRANSMISSION LINE
- HIKING OR WALKING, CYCLING, CROSS COUNTRY SKIING
- HIKING OR WALKING, CYCLING, CROSS COUNTRY SKIING, EQUESTRIAN
- ---- PADDLING

- PADDLING, PORTAGE
- --- PORTAGE
- - ACCESS TRAIL
- BIKE TRAIL
- CANOE ROUTE
 PORTAGE
- PORTAGE / RESOURCE USER
- PORTAGE TRAIL
- - RESOURCE USER
- = = SKI
- SNOWMOBILE TRAIL
- - SNOWMOBILE TRAIL / PORTAGE

- SNOWMOBILE TRAIL / RESOURCE USER
- EXISTING ACCESS ROAD NO IMPROVEMENTS REQUIRED
- EXISTING ACCESS ROAD POTENTIAL IMPROVEMENTS
- NEW ACCESS ROAD PREFERRED
- NEW ACCESS ROAD ALTERNATE
 PREFERRED ROUTE TRANSMISSION
- LINE RIGHT-OF-WAY
- D26A / F25A CIRCUIT SEPARATION
- AGGREGATE SITE
- CAMP / LAYDOWN

- CONSTRUCTION CAMP (NO LONGER TO BE USED)
- FLY YARD / CAMP / LAYDOWN
- LOCAL STUDY AREA
- REGIONAL STUDY AREA
- MAIN BASE LODGE MARINA/DOCK
- SKI HILL, NOT REMOTE
- RECREATION CAMP
- COTTAGE SITE, NOT REMOTE
- COTTAGE SITE, REMOTE RESIDENTIAL SITE, NOT REMOTE



CLIENT HYDRO ONE NETWORKS INC.

CONSULTANT	YYYY-MM-DD	2023-10-30
\\\\\\\\\\\\\\	DESIGNED	NA
	PREPARED	DB
	REVIEWED	НК
	APPROVED	CS

REFERENCE(S)	

BASE DATA COURTESY OF LAND INFORMATION ONTARIO MNRF. IMAGERY COPYRIGHT © ESRI AND ITS LICENSORS. USED UNDER LICENSE, ALL RIGHTS RESERVED. PROJECTION: NAD 1983 CSRS UTM ZONE 15N

PROJECT

WAASIGAN TRANSMISSION LINE

TITLE OUTDOOR TOURISM AND RECREATIONAL LAND USE IN THE STUDY AREAS

PROJECT NO.	CONTROL	REV.	FIGURE
20137728	0030	1	7.1.8-3



- LEGEND
- MNO COUNCIL OFFICE 230 KV TRANSFORMER STATION (TS)
- 0 ACCESS POINT
- BOAT CACHE, COMMERCIAL 0
- 0 BOAT CACHE, RESOURCE HARVEST
- 0 CAMPING SITE
- PICNIC SITE
- 00 EXISTING TRANSMISSION LINE
- ---- HIKING OR WALKING
- -- HIKING OR WALKING, CYCLING
- HIKING OR WALKING, CYCLING, CROSS COUNTRY SKIING
- ---- HIKING OR WALKING, SNOWSHOEING
- = = PADDLING

- PADDLING, PORTAGE
- ---- PORTAGE
- PATH OF THE PADDLE TRAIL EXISTING ACCESS ROAD - NO IMPROVEMENTS REQUIRED
- EXISTING ACCESS ROAD POTENTIAL
- NEW ACCESS ROAD ALTERNATE
- PREFERRED ROUTE TRANSMISSION

- CAMP / LAYDOWN

- IMPROVEMENTS
- NEW ACCESS ROAD PREFERRED

 - LINE RIGHT-OF-WAY
- AGGREGATE SITE
- FLY YARD

- LOCAL STUDY AREA REGIONAL STUDY AREA
- COMMERCIAL CAMPGROUND
- GOLF COURSE
- HORSE RIDING STABLE
- MAIN BASE LODGE
- MARINA/DOCK
- OUTPOST CAMP
- SKI HILL, NOT REMOTE
- RECREATION CAMP
- COTTAGE SITE, NOT REMOTE
- COTTAGE SITE, REMOTE
- RESIDENTIAL SITE, NOT REMOTE



CLIENT HYDRO ONE NETWORKS INC.

CONSULTANT	YYYY-MM-DD	2023-10-30
	DESIGNED	NA
\\S D	PREPARED	DB
	REVIEWED	НК
	APPROVED	CS

REFERENCE(S) BASE DATA COURTESY OF LAND INFORMATION ONTARIO MNRF. IMAGERY COPYRIGHT © ESRI AND ITS LICENSORS. USED UNDER LICENSE, ALL RIGHTS RESERVED. PROJECTION: NAD 1983 CSRS UTM ZONE 15N

PROJECT

WAASIGAN TRANSMISSION LINE

TITLE OUTDOOR TOURISM AND RECREATIONAL LAND USE IN THE - STUDY AREAS

PROJECT NO.	CONTROL	REV.	FIGURE
20137728	0030	1	7.1.8-4



Trail Type	Frequency of Occurrence in the Project Footprint	Area Intersecting the Project Footprint (km)	LSA Frequency of Occurrence	Area in the LSA (km)	RSA Frequency of Occurrence	Area in the RSA (km)
Hiking or Walking	0	0	1	1.4	1	1.4
Hiking or Walking, Cycling	0	0	2	53.4	2	53.4
Hiking or Walking, Cycling, Cross Country Skiing	1	1.2	3	191.9	3	306.3
Hiking or Walking, Cycling, Cross Country Skiing, Equestrian	1	0.3	1	60.0	1	60.0
Hiking or Walking, Cycling, Paddling	0	0	2	4.8	2	4.8
Hiking or Walking, Cycling, Snowshoeing, Paddling	0	0	5	67.1	5	67.1
Hiking or Walking, Cross Country Skiing	0	0	3	12.6	3	18.6
Hiking or Walking, Snowshoeing	0	0	2	3.0	2	3.0
Cross Country Skiing	0	0	1	1.4	1	4.9
Paddling	2	1.1	2	167.7	2	344.1
Paddling, Portage	3	0.6	5	180.6	5	429.7
Portage	0	0	1	1.2	1	1.2
Total	7	3.2	28	745.1	28	1,294.6

 Table 7.1-35:
 Ontario Trail Network Trail Frequency and Area in the Study Areas

Source: (MNRF 2022i).

Note: Some of the numbers are rounded for presentation purposes.

LSA = Local Study Area; RSA = Regional Study Area; km= kilometres.





Trail Type	Frequency of Occurrence in the Project Footprint	Area Intersecting the Project Footprint (km)	LSA Frequency of Occurrence	Area in the LSA (km)	RSA Frequency of Occurrence	Area in the RSA (km)
Hiking	1	<0.1	10	5.0	13	5.9
Hiking/Skiing	0	0	11	12.0	11	15.0
Hiking/Snowshoeing	0	0	3	2.6	3	2.6
Biking	8	1.5	116	48.3	125	53.3
Skiing	5	5.8	43	51.8	43	55.3
Snowmobile	19	47.1	41	171.1	49	206.3
Snowmobile/Portage	1	<0.1	10	6.2	12	7.5
Snowmobile, Resource User	5	28.2	6	37.4	6	37.4
Canoe Route	1	<0.1	3	12.9	12	16.1
Path of the Paddle Trail	0	0	1	1.9	1	10.0
Portage	13	0.8	59	19.0	91	29.0
Portage/Hike	0	0	5	0.9	1	0.9
Portage/Hike/Ski	0	0	3	1.9	3	1.9
Portage/Resource User	0	0	0	0	1	0.7
Resource User	3	2.5	13	35.1	22	65.8
Access Trail	0	0	0	0	1	0.3
Other ^(a)	49	71.4	246	497.6	288	691.1
Total	105	157.3	570	903.7	682	1199.1

 Table 7.1-36:
 Non-Ontario Trail Network Trail Frequency and Area in the Study Areas

Source: (MNRF 2022i).

Note: LSA = Local Study Area; RSA = Regional Study Area; km= kilometres.

a) A particular use was not defined by MNRF for trails listed as "other."



7.1.7.7.2.2 Camping, Commercial Tourism, and Recreational Infrastructure

Project Footprint

Based on available MNRF data (MNRF 2022h), the Project footprint crosses:

- Three cottage sites (not remote), with a total area of <1 ha; however, none are visible on aerial imagery and the MNRF points are located within existing disturbances;
- One designated camping site (area unavailable), located within the adjacent existing transmission line ROW;
- One outpost camp with an area of <1 ha, crossed by a proposed new access road;
- One horse riding stable with an area of <1 ha, located adjacent to an existing access road with no potential improvements; and

One main base lodge with an area of <1 ha crossed by the ROW (MNRF 2022h).Local Study Area

Based on available MNRF data, there are camps, cabins and cottages located throughout the LSA (MNRF 2022h). There are 303 cottages, with 239 of these cottages being not remote and covering a total area of 35.4 ha compared to 64 remote cottages with a total area of 20.6 ha (MNRF 2022h). There are also 9 not remote residential sites (non-primary residences of individuals which may reside at cabins, camps, and cottages seasonally or for a large majority of the year) with a total area of 15.0 ha (MNRF 2022h). There are 84 designated camping sites within the LSA (MNRF 2022h).

The MNRF identifies four commercial campgrounds with a total area of 6.9 ha, one commercial parking lot (0.3 ha), and eight outpost camps with an area of 1.2 ha in the LSA (MNRF 2022h). There is a total of 36 main base lodges with an area of 39.4 ha, as well seven recreational camps with a total area of <1 ha and one youth camp with an area of <1 ha in the LSA (MNRF 2022h).

There is one picnic site, one marina/dock with an area of <1 ha, one commercial horse riding stable with an area of <1 ha, one ski hill (not remote) with an area of <1 ha, and one golf course with an area of 62.3 ha in the LSA (MNRF 2022h).

There are also a number of boat caches in the LSA including commercial boat caches (22 instances), private boat caches (23 instances), and resource harvest boat caches (3 instances) (MNRF 2022h). Several fishing derbies and tournaments are held in northwestern Ontario each year, most being walleye or bass tournaments. Some of the major fishing tournaments in the LSA include the Atikokan Bass Classic (Marmion Lake), and Tbaytel Dryden Walleye Masters (Wabigoon Lake) and the Annual Thunder Bay Salmon Derby (Northern Ontario Travel 2019; TBNewsWatch 2022).

The City of Dryden has two motocross raceways, which are the Northwood Raceway and the Thunder Lake Motocross track. Northwood Raceway is now closed and was listed as



operational between the years of 1968 to 1970 and 1991 to 2003, while the status of Thunder Lake Motocross track is not known. The Atikokan Speedway is decommissioned and was last operational in the 1960s. Two speedways have historically operated in the City of Thunder Bay, the Canadian Lakehead Exhibition and Riverview Raceway, but both are now decommissioned. Thunder City Speedway, located in the Municipality of Oliver Paipoonge, is currently operational, but not located near the Project footprint (Canadian Racer n.d.).

Regional Study Area

Camps, cabins, and cottages are used seasonally by residents and tourists of the region. Based on available MNRF data, there are 368 cottage sites and 17 not remote residential sites in the recreation and commercial tourism land use RSA for the Project (MNRF 2022h). Within the cottage sites, there are 286 cottages that are not remote, with a total area of 199.1 ha and 82 remote cottage sites, with an area of 83.2 ha. The 17 not remote residential sites have an area of 47.3 ha (MNRF 2022h). There are 177 designated camping sites within the RSA (MNRF 2022h). Camping and other recreational activities on Crown land and conservation reserves are available year-round for personal or temporary use, at no cost. However, some restrictions apply related to the duration of visitors' stay, and recreational users' activities, depending on location (MNRF 2022j). Additional information regarding camping and land use on Crown lands is available within the CLUPA.

In the RSA, the MNRF identifies one picnic site, four commercial campgrounds with a total area of 6.9 ha, one commercial parking lot (0.3 ha), and 16 outpost camps with a total area 1.3 ha (MNRF 2022h). There are 19 recreational camps with a total area of 1.4 ha and one youth camp with an area of <1 ha in the RSA (MNRF 2022h). There are also 43 identified main lodges with a total area of 39.4 ha and one inn with an area of <1 ha in the RSA (MNRF 2022h).

In the RSA, there are also two golf courses with a total area of 84.4 ha, two horse riding stables with a total area of <1 ha, one inn (0.2 ha), a shooting hill range with an area of <1 ha, two ski hills (not remote) with an area of 4.8 ha, and one tree tapping area (21.8 ha) (MNRF 2022h). Additionally, there are two marinas/docks in the RSA, with a total area of <1 ha (MNRF 2022h).

There are also a number of boat caches in the LSA including commercial boat caches (38 instances), private boat caches (31 instances), and resource harvest boat caches (4 instances) (MNRF 2022h).

The Ministry of Tourism, Culture and Sport (MTCS) provides information on RTOs, which are independent, not-for-profit organizations led by the tourism sector which play an important role in fostering competitive and viable tourism regions across the province of Ontario. There are 13 RTOs located throughout the Province of Ontario, each led by an RTO. The regional boundaries of the provincial RTOs were developed taking into consideration travel patterns, common markets, natural landforms and existing infrastructure, as well as input from consultation and engagement efforts with tourism partners, the public and Indigenous groups. The Project footprint is located within RTO 13c – Northwest Ontario, which is a subregion of RTO 13 – Northern Ontario (MTCS 2023).



Based on MTCS data, 194,727 visitors travelled to RTO 13c for fishing activities in 2019. Based on the same data approximately 34.4% of visitors were from Ontario, 4.9% from overseas and the remaining 60.7% were from outside of Ontario or the United States. In 2019, spending by visitors in RTO 13c totalled \$552,830,607. Visitors from the United States contributed to the largest majority of spending totalling \$233,441,142, visitors from within the province of Ontario spent a total of \$174,708,068, visitors from within Canada but outside of Ontario spent a total of \$119,951,408, and international visitors spent a total of \$24,729,989. The data from MTCS also noted that 256 hunting and fishing camps were in operation in 2021 (MTCS 2022).

RTO 13c is a subregion of RTO13 and is a destination for approximately one-third of overnight tourists in northern Ontario but is more popular among anglers. The RTO 13c subregion attracts the largest share of anglers out of the three subregions of RTO 13 (RTO 13a, 13b and 13c). Publicly available data is limited and/or dated for RTO 13/RTO13c and from Fisheries and Oceans Canada (DFO). Additionally, there are potential recent impacts of the COVID-19 pandemic on the northern Ontario tourism industry as many outfitters were impacted during shutdowns.

Previous research demonstrates that recreational fishers are also less likely to travel great distances to fish. Ontario anglers drive an average of 225 km to access fishing stocks (De Kerckhove et al. 2015; Hunt and Lester 2009). Similarly, research has demonstrated that sustainable levels of recreational fishing are likely to occur in fishing locations farther than 100 km from population centres of 100,000 people, where fishing locations tend to remain relatively unexploited (Post et al. 2002; Post et al. 2008) as is the case for the LSA.

7.1.7.8 Navigation

7.1.7.8.1 Regulatory Context and Overview

The *Canadian Navigable Waters Act*, which was last updated in 2019, is a piece of federal legislation that regulates works that may impact designated navigable waterways in Canada (*Canadian Navigable Waters Act* 1985). Designated navigable waterways in northwestern Ontario listed in the Schedule to the Act are Eagle Lake, Rainy Lake, and Lake of the Woods. Eagle Lake is located nearest to the Project but is located outside of the RSA (*Canadian Navigable Waters Act* 1985).

There are non-designated navigable watercourses present within the Project footprint, LSA, and RSA.

With regard to construction of watercourse crossings, the waterbodies are otherwise mostly in the jurisdiction area of the MNRF, except for sections of the Kaministiquia River, Matawin River, Current River, and North Lake Superior Shoreline that are located in the jurisdiction of the Lakehead Region Conservation Authority (LRCA) administrative area.

Marine transportation, including recreational boat usage, is managed through Transport Canada (TC) under the *Canada Shipping Act*, *2001*. Regulation SOR/99 53, Competency of Operators



of Pleasure Craft, and Regulation SOR/2010 91, Small Vessel Regulations, outline operator competency requirements, boat age and horsepower restrictions, safety equipment requirements and alcohol prohibitions (*Canada Shipping Act* 2001). Pleasure Craft Licences must be held by owners through Transport Canada, and boaters must carry Pleasure Craft Operator Cards (TC 2020).

7.1.7.8.2 Navigation and Aquatic Recreation Activities in the Study Areas

Baseline characterization was completed for water crossings to identify the waterbodies that are expected to be crossed by the Project footprint. The list is discussed in Section 6.2(Surface Water) and the full list of waterbody crossing locations is provided in Table A-1 of Appendix 6.2-B and is available in Section 6.2.5.1.1 (Water Crossing List Development). There are several navigable waterways used for boating kayaking and canoeing.

Communities in the RSA have established several aquatic recreation focused organizations including, but not limited to:

Town of Atikokan

- Atikokan Sportsmen's Conservation Club; and
- Bow to Stern Canoe Association (Atikokan Economic Development Corporation 2022; Visit Atikokan n.d.).

• City of Dryden

- Dryden Kayak and Canoe Club;
- Dryden Kinsmen Dragon Boat Festival;
- Dryden Windsurfing Regatta and Northwest Ontario Windsurfing Club; and
- Dryden Yacht Club (City of Dryden 2017; Sunset Country 2022).
- City of Thunder Bay
 - Lakehead University Canoe and Kayak Club;
 - Temple Reef Sailing Club;
 - Thunder Bay Paddling Club;
 - Thunder Bay Rowing Club; and
 - Thunder Bay Yacht Club (Temple Reef Sailing Club 2022; Thunder Bay Rowing Club n.d.; Thunder Bay Yacht Club 2022).







Project Footprint

There are no boat caches in the Project footprint, including commercial, private, or resource harvest boat caches. As described in Section 7.1.7.6.5, there are 42 BHAs, no aquatic access points, six trout-bearing lakes with an area of 6.5 ha. (MNRF 2022h).

Local Study Area

There are 48 boat caches in the LSA, including 22 commercial, 23 private, and 3 resource harvest boat caches. Private boat caches are typically managed by residents and individual camp (cottage) owners, while commercial boat caches are managed by various local guided outfitters and commercial camps (MNRF 2022h).

As described in Section 7.1.7.6.5, there are 59 BHAs, 45 fishing access points, 59 trout-bearing lakes in the LSA with an area of 32,521.4 ha (described in Section 7.1.7.6.5) (MNRF 2022h).

Aquatic access points are sites where anglers can access fishing locations as defined by MNRF.

Regional Study Area

There are 73 boat caches in the RSA, including 38 commercial, 31 private, and 4 resource harvest boat caches. Private boat caches are typically managed by residents and individual camp (cottage) owners, while commercial boat caches are managed by various local guided outfitters and commercial camps (MNRF 2022h).

As described in Section 7.1.7.6.5, there are 83 BHAs, fishing access points, 90 trout-bearing lakes in the RSA, with an area of 55,930.0 ha (described in Section 7.1.7.6.5) (MNRF 2022h).

Figure 7.1-9 provides details related to navigation activities throughout the Project area including the Project footprint, LSA and RSA.









25mm IF THIS MEASUREMEN





		YYYY-MM-DD	2023-10-30
		DESIGNED	NA
		PREPARED	DB
		REVIEWED	НК
	•	APPROVED	CS



- LOCAL ROAD



		YYYY-MM-DD	2023-10-30	
		DESIGNED	NA	
		PREPARED	DB	
		REVIEWED	НК	
	•	APPROVED	CS	

-				
	20137728	0030	1	7.1.9-4
	PROJECT NO.	CONTROL	REV.	FIGURE



7.1.8 Potential Project-Environmental Interactions

Potential Project-environment interactions were identified through a review of the Project Description and existing conditions. The linkages between Project components and activities and potential effects to Non-Indigenous Land and Resource Use are identified in Table 7.1-37.









Criteria	Indicator	Project Stage Construction ^(a)	Project Stage Operation and Maintenance	Retirement Stage	Description of Potential Project-Environment Interaction
 Provincial Parks; Conservation Reserves; ANSIs; and Enhanced Management Areas 	 Change to protected areas including: Provincial parks and provincial nature reserves; Conservation reserves; ANSIs (and candidate ANSIs); and Other ecologically sensitive areas in the Project footprint. 	V	V	V	• The Project may intersect with Provincial Parks, Conservation Reserves, ANSIs, and other ecologically sensitive areas in the Project footprint, resulting in change to land use.
 Provincial Parks; Conservation Reserves; ANSIs; and Enhanced Management Areas 	• Change in the ability to conform with the policy direction and maintain the management objectives of the provincial parks and protected areas crossed by the Project footprint.	✓	-	-	• The Project may intersect with Provincial Parks, Conservation Reserves, ANSIs, and other ecologically sensitive areas in the Project footprint, resulting in a need to change the management objectives of the parks and protected areas crossed.
 Land Use Planning 	 Change and conformance to land use planning. 	~	-	-	 The Project may intersect with land parcels and not conform with the current land use planning (i.e., zoning).
 Land Use Planning 	 Changes to current land use. 	~	~	✓	 The Project may intersect with lands currently used for other purposes

Table 7.1-37:	Project-Environment Interactions for Non-Indigenous Land and Resource Use



	Criteria	Indicator	Project Stage Construction ^(a)	Project Stage Operation and Maintenance	Retirement Stage	Description of Potential Project-Environment Interaction
•	Forestry Resource Use	 Change to access and availability of forestry resources considering: Forest management units crossed by the Project footprint; and Available and planned harvest volume. 	V	✓	✓	 The Project may intersect with areas and access for forestry resources.
٠	Mining Resource Use	 Change in access to mining resources considering: Proximity to mining claims in the study area; Proximity to active and planned mines, and associated infrastructure (i.e., mine access roads), in the study area; and Proximity of inactive (abandoned) mines in the study area. 	V	V	~	 The Project may intersect with areas and access for mining resources.



Criteria	Indicator	Project Stage Construction ^(a)	Project Stage Operation and Maintenance	Retirement Stage	Description of Potential Project-Environment Interaction
 Aggregate Resources 	 Change in the availability of aggregate resources in the study area considering: Proximity to aggregate pits and associated infrastructure; Area (ha) of high potential for aggregate resources in the Project footprint; and Anticipated volume and sources of aggregate required for the Project. 	V	✓	✓	 The Project may intersect with areas and access for aggregate resources.
 Hunting, Trapping, and Fishing 	 Changes to hunting, trapping, and fishing in the study area considering: Wildlife Management Units crossed by the Project footprint; Proximity to traplines in the study area; Number and types of hunting licences in the study area; and Waterbody features used for recreational fishing in the Project footprint. 	V	V	*	 The Project may intersect with areas and access for hunting, trapping, fishing, and associated activities.



Criter	ia	Indicator	Project Stage Construction ^(a)	Project Stage Operation and Maintenance	Retirement Stage	Description of Potential Project-Environment Interaction
 Recrea and Commo Tourisr 	tion ercial	 Change to recreation and commercial tourism considering: Proximity to outpost camps in the study area; Proximity to areas of concern associated with tourism and recreation in the study area; Proximity to cabins and cottages in the study area; Proximity to recreational trails and access points in the study area; Proximity to other recreational features, including canoe routes, backcountry campsites, shore launch sites, boat launches in the study area; Proximity to campgrounds in the study area; and 	•	✓	✓	 The Project may intersect with lands available for recreation and commercial tourism activities.



Criteria	Indicator	Project Stage Construction ^(a)	Project Stage Operation and Maintenance	Retirement Stage	Description of Potential Project-Environment Interaction
 Navigation 	 Change to navigation considering: Navigable watercourses crossed by the Project footprint; and Types and timing of watercourse crossings to be used or constructed. 	~	~	✓	 The Project may intersect with areas and access for navigable watercourses, watercourse crossings, and navigation.

 \checkmark = A potential Project environment interaction could result in an environmental or socio-economic effect; _ = No plausible interaction was identified; ANSI = Area of Natural and Scientific Interest.

ROW = Right-of-Way.

a) As described in Section 6.3.4.1, the construction scenario assessed as part of the EA is considered bounding and potential effects and mitigation measures for retirement are not identified separately in this EA.





7.1.9 Potential Effects, Mitigation Measures, and Net Effects

This section presents the potential effects, appropriate mitigation measures and predicted net Project effects for non-Indigenous land and resource use. A summary of the potential effects, mitigation measures, and net effects are presented in Table 7.1-38.

7.1.9.1 Parks and Protected Areas

This section provides details related to the potential effects, mitigation measures, and net effects related to impacts on provincial parks, conservation areas, ANSIs, and enhanced management areas, as well as the Project's ability to conform with the *Provincial Parks and Conservation Reserves Act, 2006*, regulations under the Act, as well as the policy direction and management objectives of the parks and protected areas crossed by the Project footprint. Regulations under the *Provincial Parks and Conservation Reserves Act, 2006* include:

- O.Reg. 347/07 Provincial Parks: General Provisions;
- O.Reg. 346/07 Mechanized Travel in Wilderness Parks;
- O.Reg. 345/07 Work Permits;
- O.Reg. 319/07 Conservation Reserves: General Provisions;
- O.Reg. 316/07 Designation and Classification of Provincial Parks; and
- O.Reg. 315/07 Designation of Conservation Reserves.

7.1.9.1.1 Changes to Protected Areas

Potential Effects

The Project is designed to maximize alignment with existing infrastructure corridors to reduce disturbances to natural, cultural, and recreational values in the Project footprint, including provincial parks and protected areas. In addition, to avoid disturbances to land use quantity and access in the provincial parks, conservation reserves, ANSIs, and enhanced management areas within the LSA, existing access roads and trails will be used to the extent practicable to limit disturbances to access for parks and protected areas resulting from the construction of new access roads and trails.

The parks and protected areas that are crossed by the Project footprint include:

- Quetico Provincial Park (existing access road only);
- Turtle River-White Otter Lake Provincial Park;
- Campus Lake Conservation Reserve;
- Swamp River ANSI; and



• White Otter Enhanced Management Area.

The parks and protected areas that are crossed by the ROW include:

- Turtle River-White Otter Lake Provincial Park;
- Campus Lake Conservation Reserve; and
- White Otter Enhanced Management Area.

As described in Section 7.1.7.1 (Provincial Parks, Conservation Reserves, Areas of Scientific Interest, and Enhanced Management Areas) and in Table 7.1-5, protected areas make up the following:

- Provincial parks make up 13.2 ha (<0.1%) of the Project footprint and 2.4 ha (<0.01.%) of the ROW;
- Conservation reserves make up 91.0 ha (0.4%) of the Project footprint and 56.0 ha (0.2%) of the ROW;
- ANSIs make up 0.6 ha (0.4%) of the Project footprint and 0.6 ha of the ROW (0.4%); and
- Enhanced management areas make up 61.3 ha (1.1%) of the Project footprint and 23.5 (0.4%) ha of the ROW.

Of the 82.9 ha of the ROW that intersects parks and protected areas, approximately 75.3 ha is forested and will require vegetation clearing to maintain the integrity and safety of the transmission line and certain to occur.

Quetico Provincial Park: The Project footprint crosses Quetico Provincial Park in one location north of Win Lake where the ROW runs adjacent to the park boundary. The Project proposes to use an existing access road that crosses through a portion of the park to access the ROW. The existing access road crosses through a small stand-alone portion of the park that is north of Highway 11 and Win Lake. No new infrastructure or construction within the park is expected. The proposed use of the existing access road does not require road improvements and no changes to the management plan are expected to be required for the Project. Section 7.4 (Visual Aesthetics) elaborates on potential visual effects land users within Quetico Provincial Park may experience.

Turtle River-White Otter Lake Provincial Park: The Project footprint traverses the Turtle River-White Otter Lake Provincial Park between Balmoral Lake and Elbow Lake. It is not possible to completely avoid crossing the provincial park given its large geographic extent, so the ROW is proposed to be adjacent to an existing transmission line through the provincial park. The crossing includes the construction of approximately 510 m of the ROW. Access roads which pass through Turtle River-White Otter Lake Provincial Park will consist of 676 m of new



access road construction and 469 m of existing access road construction where potential improvements may be made. The majority of the access roads will be restricted to being within either the new ROW or adjacent to the existing ROW. Further, only a single access road will be maintained permanently through the provincial park, and it will service both the new and existing transmission line. The infrastructure proposed includes one structure, but no other disturbances, such as laydown areas or helicopter pads.

Although there are no guidelines in the park's management plan for new transmission corridors, it is expected that the management plan for Turtle River-White Otter Lake Provincial Park would need to be amended to permit new transmission corridors per Section 21 of the *Provincial Parks and Conservation Reserve Act, 2006* (MECP, 2021n). Section 7.4 (Visual Aesthetics) elaborates on potential visual effects land users within Turtle River-White Otter Lake Provincial Park Park may experience.

Campus Lake Conservation Reserve: The Project footprint traverses the Campus Lake Conservation Reserve west of Sandford Lake near Ann Bay Portage and between Turtle River, Mable Lake and Campus Creek. There is an existing transmission line through the conservation reserve, so the ROW has been proposed to run adjacent to it. The crossing includes the construction of 12.2 km of ROW and 28.2 km of access roads. Access roads that pass through Campus Lake Conservation Reserve will consist of 14.3 km of new access road construction, and 13.9 km of existing access road construction where potential improvements may be made. Where access roads are required outside of either ROW, most are existing access roads where potential improvements are required instead of new access roads. Two helicopter pads are proposed within the conservation reserve; however only one will be required and the final location will be determined during detailed design.

The Campus Lake Conservation Reserve Management Statement allows for transmission corridors, and one currently runs through the site between Elsie Lake and Campus and Mable Lakes. Section 4.2.8 of the statement notes that the existing corridor may continue to be used and new facilities should avoid conservation reserve lands wherever possible. It is expected that the management statement for the Campus Lake Conservation Reserve would not need to be updated as the Project would follow the existing corridor and the management statement permits this use (MECP 2021d). Section 7.4 (Visual Aesthetics) elaborates on potential visual effects land users within the Campus Lake Conservation Area may experience.

Swamp River ANSI: The Swamp River ANSI is overlapped by the Project footprint by 0.6 ha. Generally, site alteration is not permitted within ANSIs. The PPS 2020 states that development and site alteration shall not be permitted where ANSIs are present unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological function. MNRF has provided Hydro One with additional information to provide a description of the Swamp River ANSI and better understand the geographic extent of the feature, as well as recommended protections. The Project is not expected to result in impacts to the Swamp River ANSI as the Project ROW and other Project components (i.e., access roads) will not overlap the



identified bedrock outcrop. Additionally, no blasting is required in the ANSI given the bedrock feature.

White Otter Enhanced Management Area: The Project footprint for the preferred route traverses the White Otter Enhanced Management Area. It is not possible to completely avoid crossing the enhanced management area given its large geographic extent; however, utility infrastructure is generally permitted with appropriate planning and permitting outlined in the Resource Management Guideline for the White Otter Enhanced Management Area (2005), the Atikokan District Land Use Guidelines, and the CLUPA.

Construction Stage: During the Project construction stage, site preparation (e.g., clearing, grubbing, and grading), the construction of infrastructure (e.g., access roads, fencing, bridges, temporary laydown areas, turn around areas, watercourse crossings, and construction camps), the assembly and erection of transmission structures (foundation and structure assembly), and the transportation of construction workers, equipment and materials will occur within limited segments of two provincial parks, one conservation reserve, one ANSI, and one enhanced management area.

With respect to direct effects, the ROW will be cleared of vegetation and grubbed during the Project construction stage. Vegetation clearing will consist of cutting tree trunks parallel to, and within 15 cm of the ground or lower, as well as the removal of shrubs, debris, and other such materials. Grubbing may be required along some parts of the ROW. In these areas, vegetation will be removed manually, using chain saws and other hand-held equipment, while leaving the under growth and duff layer undisturbed to prevent erosion.

Temporary and permanent access roads are anticipated for the construction and operation phases of the Project. An access road may be established within the transmission line ROW for use during operation and maintenance. The access will be located, for the most part, within the cleared ROW; however, in some places (e.g., where the ROW spans a waterbody or crosses difficult terrain) an access road off ROW may be required to reduce the number of watercourse crossing requirements.

Temporary laydown areas and temporary construction camps will not be located within provincial parks or protected areas.

During construction, access to and within the provincial parks, conservation reserve, ANSI and enhanced management area may be temporarily affected by increased traffic and road restrictions. As a result, Project construction activities may temporarily reduce or limit access to certain portions of existing areas with intermittent, short-term closures, partially displacing users both due to the activities occurring and in order to protect user safety. These access restrictions and reductions in the quantity of land available to the public will be limited. These access restrictions will be intermittent and temporary, as the Project is predicted to pursue a staggered construction approach. Access restrictions will only occur in certain areas and is estimated to extend only a few weeks to a few months while active construction is ongoing in that particular



segment of the Project alignment, before construction moves to another segment along the linear corridor and restores access to parks and protected area users.

Net, negative effects of low to high magnitude have been identified for other environmental components that pertain to parks and protected areas, including vegetation and wetlands, wildlife, acoustics, and the visual aesthetics, as described in Section 6.4.8 (Vegetation and Wetlands), Section 6.5.8 (Wildlife), and Section 6.9.9 (Acoustics), and Section 7.4.8 (Visual Aesthetics). These net effects have the potential to indirectly affect land use quality in provincial parks, conservation reserves, ANSIs, and enhanced management.

Specifically, construction activities have the potential to affect specific features that support the natural values, cultural values and recreational values found within parks and protected areas. Features are key aspects identified in the vegetation and wetlands, surface water and groundwater, wildlife, fish and fish habitat, archaeology, heritage resources, visual quality and non-Indigenous land and resource use assessments that are of environmental, recreational, aesthetic, historical, cultural, social and/or spiritual importance, and could potentially be affected by the Project. These include:

- Natural waterbodies, wetlands, ecosystems and significant wildlife habitat, representative geological formations, critical landform vegetation associations;
- Cultural archaeological and cultural sites and areas; areas of archeological and/or cultural potential, traditional land use areas; and
- Recreational hunting, fishing and trapline license areas, canoe routes, trails, campsites, campgrounds, access points, boat launches and boat caches, main lodges, outpost camps, cottages and camps, tourism establishment areas and potential tourism establishment areas.

Potential changes to wildlife or fish could also affect the perceived quality of park users' experience, while the removal of vegetation during construction and operation will make the area of the ROW apparent and accessible, introducing noticeable biophysical and visual aesthetics changes to affected portions of parks and protected areas for park users.

Construction and maintenance crews will be present and visible, and noise and air emissions associated with their activities may be present. These emissions (e.g., air, dust, noise, and effluent) are addressed in the appropriate chapters as part of the effects assessment of the Project (see Section 6.0). Waste will be appropriately stored, transported, and disposed of according to applicable provincial and federal laws and regulations.

With respect to indirect effects, as indicated in Section 6.2.9 (Surface Water), Section 6.7.8 (Fish and Fish Habitat), and Section 6.6.8 (Air Quality), net effects identified on surface water, fish and fish habitat, and air quality assessments are expected to be not significant during construction and operation with the implementation of mitigation measures. Therefore, indirect effects on the quality of provincial parks, conservation reserves, enhanced



management areas, and ANSIs lands due to changes in surface water, air quality and fish and fish habitat are not predicted and are not given any further consideration in this chapter.

The results of the visual aesthetics assessment (Section 7.4.7) indicate that construction activities would create noticeable but temporary changes in visual quality by introducing construction vehicles, construction equipment and materials, and workers. Construction and operation activities have the potential to cause changes in visual aesthetics in parks and protected areas located within the ROW and Project footprint through vegetation removal, modifying landforms, and introducing built structures in previously forested areas.

Section 7.4.7 (Potential Effects, Mitigation Measures, and Net Effects) identifies that Project components would be partially or fully obstructed by landforms and vegetation screening at most viewing locations in the visual aesthetics LSA. The Project is more likely to be visible along the ROW that does not parallel existing alignments, where Project infrastructure contrasts with natural areas (i.e., predominately forested areas). Only a very small portion of parks and protected areas in the non-Indigenous land and resource use LSA are transected by the ROW that would experience new clearing (i.e., 75.3 ha of forested area, or <0.1% of parks and protected areas located within the Project ROW). This limits the extent of effects on park and protected area users' experience due to changes to visual aesthetics.

Operations and Maintenance Stage: During operation, maintenance of access roads and waterbody crossings, and periodic inspection of the transmission line and associated infrastructure, and necessary repairs and vegetation management along the ROW, may also take place within the protected areas crossed by the Project footprint during the life of the Project. Vegetation management in previously forested areas within or adjacent to parks and protected areas will occur during the operation and maintenance phase in the permanent ROW in order to maintain transmission line integrity.

Such operation activities may result in restricted access near the areas of maintenance. These activities are expected to be infrequent. Additional access and crossing maintenance may be identified during post-construction monitoring.

As well, during operation, infrequent occurrences of audible noise may be perceptible from maintenance activities or from the transmission line when a small amount of electrical energy within the conductor interacts with the air surrounding the conductor surface. Therefore, there is a chance that the Project will produce some noise under foul weather conditions (e.g., rain, fog, snow, and frost), but this noise will not likely be higher than ambient noise conditions beyond the ROW (see Section 6.9).

These access restrictions will occur only within certain segments of parks and protected areas, most heavily within the Project footprint. However, the overlap between the Project footprint and protected areas is negligible and, therefore, access restrictions within parks are anticipated to be minor within the Project footprint.



Mitigation Measures

Hydro One and its contractor will implement the mitigation measures outlined in Table 7.1-38.

Net Effects

Taking into consideration the mitigation measures described above, there is an anticipated net change to protected areas as a result of changes to environmental conditions, cultural and/or recreational values. This net effect is carried forward to the net effects characterization (Section 7.1.10)

7.1.9.1.2 Changes to the Management Objectives of Parks and Protected Areas

Quetico Provincial Park, Turtle River-White Otter Lake Provincial Park, Campus Lake Conservation Area, the Swamp River ANSI, and White Otter Enhanced Management Area are the protected areas located in the Project footprint. Additional details for each crossing and potential implications to management plans are described in Section 7.1.9.1.1 (Changes to Protected Areas).

Utility infrastructure is generally permitted under the conditions that activities/works remain in compliance with appropriate federal, provincial, and/or municipal legislation including parks and protected areas management planning policies and objectives, the *Planning Act* and the PPS (1990), and the CLUPA. As presented in Section 7.1.9.1 (Parks and Protected Areas) and Table 7.1-5, the provisioning of transmission lines and utility corridors are expected to have minimal land use conflicts and incompatibilities with the land use planning legislation and the Project.

Mitigation Measures

Hydro One and its contractor will implement the mitigation measures outlined in Table 7.1-38.

Net Effects

There is a possible net effect change in the ability to conform with the policy direction and maintain the management objectives of the provincial parks and protected areas crossed by the Project footprint. This net effect is carried forward to the net effects characterization (Section 7.1.10).

7.1.9.2 Land Use Planning

This section provides details related to potential effects, mitigation measures, and net effects related to the Project's impact on land use planning related to the use of lands designated for recreational, residential, institutional, or commercial purposes, as well as changes to planned projects in the study area (i.e., new/planned project applications).

7.1.9.2.1 Changes to Land Use Policy and Planning

Potential Effects

The Project has the potential to affect land use planning as a result of Project footprint overlap with various land use designations and zoning at the municipal and provincial level. Changes to



land use are anticipated and may involve lands designated for industrial, recreational, residential, institutional, commercial, or environmental protection purposes. The Project must consider land use planning guidance including:

- The Guide for Crown Land Use Planning and CLUPA direction for the management of general use areas, conservation reserves, forest reserves, provincial parks, enhanced management areas, ANSIs, and sensitive land areas (i.e., canoe routes).
- MECP provincial park and conservation reserve management plans and management statements;
- The *Planning Act* and PPS 2020;
- The Growth Plan for Northern Ontario;
- Municipal official plans;
- The Northern Services Board Act; and
- Local roads boards and rural planning boards.

Federal, provincial, and municipal land use planning direction and guidelines generally allow for the responsible development of infrastructure, including transmission line infrastructure. Many of the planning documents note that transmission line infrastructure is compatible with existing land use designations and do not require amendments, provided that the Project is established as necessary and that the Project fulfills the appropriate obligations related to the protection of the biophysical and cultural environment. Where necessary, consultation will take place to establish appropriate adherence to land use planning direction and prior to the construction of the Project, appropriate permits, licences, and other approvals will be acquired in order to satisfy the planning requirements of the applicable planning documents where necessary.

No changes are expected to federal reserve lands as no federal reserve lands are located within the Project footprint.

Changes may also occur within MTO-designated lands located in the Project footprint (Table 7.1-6), as well as within lands classified as Non-Freehold Disposition and Unpatented Crown Lands (Table 7.1-9).

MTO designated lands may be impacted by the Project footprint including 8.4 ha of land designated as "Controlled Land" and 8.6 ha of land designated as "Non-Controlled Access."

Crown lands, including 7.1 ha of Crown Disposition Easement, 9.9 ha of Crown Disposition Land Use Permit, 0.5 ha of Crown Disposition Leases, 1.0 ha of Crown Disposition Licence of Occupation, and 3,845.5 ha of Unpatented Crown Land, are crossed by the Project footprint. The majority of Crown lands crossed by the Project footprint include unpatented lands; however,


the Project must consider easements, land use permits, leases and licences of occupation for Non-Freehold Disposition Crown Lands.

The Project has the potential to affect land use planning as a result of Project footprint overlap with various land use designations and zoning at the municipal and provincial level. Changes to land use are anticipated and may involve lands designated for industrial, recreational, residential, institutional, commercial, or environmental protection purposes, as presented in Table 7.1-12 through Table 7.1-18.

City of Dryden: The Project footprint overlaps the City of Dryden by 85.3 ha. Additional details on the types of land uses crossed are provided in Section 7.1.7.2.3 (Municipal Land Use Policies and Municipal Designation).

City of Thunder Bay: The Project footprint overlaps the City of Thunder Bay by 38.2 ha. Additional details on the types of land uses crossed are provided in Section 7.1.7.2.3 (Municipal Land Use Policies and Municipal Designation).

Municipality of Oliver Paipoonge: The Project footprint overlaps the Municipality of Oliver Paipoonge by 0.4 ha. Additional details on the types of land uses crossed are provided in Section 7.1.7.2.3 (Municipal Land Use Policies and Municipal Designation).

Municipality of Shuniah: The Project footprint overlaps the Municipality of Shuniah by 128.0 ha. Additional details on the types of land uses crossed are provided in Section 7.1.7.2.3 (Municipal Land Use Policies and Municipal Designation).

Town of Atikokan: The Town of Atikokan will be most impacted by the Project footprint (222.0 ha). Additional details on the types of land uses crossed are provided in Section 7.1.7.2.3 (Municipal Land Use Policies and Municipal Designation).

Township of Conmee: The Project footprint does not overlap lands located within the Township of Conmee, impacts to the township are not anticipated as a result.

Township of Ignace: The Project footprint overlaps the Township of Ignace by 18.4 ha. Additional details on the types of land uses crossed are provided in Section 7.1.7.2.3 (Municipal Land Use Policies and Municipal Designation).

Unincorporated Townships/Rural Areas: There are 113 parcels of Crown land totaling 1,153.9 ha and 264 parcels of private land totaling 365.6 ha that are intersected by the Project ROW in unincorporated townships and rural areas.

Mitigation Measures

Hydro One and its contractor will implement the mitigation measures outlined in Table 7.1-38, some of which are described below.

It is the Project's intent to adhere to the requirements of existing land use planning provisions. Where necessary, consultation with municipalities, MECP and MNRF will be undertaken to establish an understanding for the Project's requirements to adhere to land use planning



direction at a provincial and local level. Prior to Project construction, appropriate permits, licences, amendments and other approvals will be acquired in order to satisfy the conditions of provincial, and municipal land use planning documents including the CLUPA, Official Plans, by-laws and appropriate zoning guidelines.

The Project footprint overlaps CLUPA restrictions described in Table 7.1-8 including designated Lake Trout Lakes, the Shebandowan Lake General Use Area, and applicable AOCs. Hydro One will work with MNRF on any CLUPA amendments required for the Project. Hydro One has minimized the Project footprint in these areas. In addition, mitigation measures for lake trout are included in Section 6.6 to limit adverse effects.

For lands designated as "Controlled Access" or "Non-Controlled Access," although MTO does not have approval for applications under the *Planning Act*, MTO may review the planning process and provide feedback to planning authorities and land developers in order to serve the transportation and land use interests of the public, preserve the function, safety, and operation of the provincial highway network, and contribute to the objectives of the PPS and other provincial legislations, including transportation and land use studies, as well as growth plans.

Where Crown land is needed to erect supporting infrastructure (e.g., construction offices, laydown areas and/or work camps, etc.), permits and authorizations from the MNRF will be obtained, as required. Likewise, in the event there are no existing roads or trails that connect to the ROW, new roads may be built. Permits or authorizations to construct access roads and water crossings on Crown or municipal land will be obtained prior to construction, as applicable.

In the event that the municipal and provincial Crown land use planning and management documents do not provide explicit guidance or permission for transmission line development, the Project will implement a permit consultation process through the Permits and Approvals Plan. This consultation process establishes a framework for meaningful engagement with interest holders, regulators, agencies, private landowners, and Indigenous communities throughout the duration of the permitting process, ROW clearing, and construction activities. The Permits and Approvals Plan acknowledges that working proactively with municipalities and communities is integral, with consultation and engagement following Hydro One's protocols.

Where the application of the *Planning Act* and PPS 2020 applies in lieu of or in coordination with municipal planning, Section 1.6.8 (Transportation and Infrastructure Corridors) and 2.0 Wise Use and Management of Resources of PPS 2020 should be taken into consideration and adhered to.

Hydro One will engage with the appropriate land-use planning authority for land-use related permissions and permits for all areas, municipalities and unincorporated/unorganized Townships.





City of Dryden: Additional mitigation measures related to conformance with planning policies for the City of Dryden include the following:

- Hydro One will engage with the City of Dryden to determine if additional technical studies are required for the Project crossing waste disposal industrial lands via an existing access road where no improvements are required.
- Utility infrastructure which overlaps extractive industrial lands should not adversely affect the viability of the extractive industry in the future.
- Site alteration which overlaps open space lands should complement the natural area and ensure the protection of the City of Dryden's trail systems.
- Site alteration which overlaps rural lands should preserve the character and scenic quality of the rural landscape.

City of Thunder Bay: Additional mitigation measures related to conformance with planning policies for the City of Thunder Bay include the following:

 Engage with the City of Thunder to determine if the one existing access road with potential improvements crosses a small area of environmental protection zone lands.

The Municipality of Shuniah: Additional mitigation measures related to conformance with planning policies for the Municipality of Shuniah include the following:

 Site alteration within rural lands should ensure that the rural character of the environment and existing agricultural and/or natural resource operations are protected.

The Town of Atikokan: There are no additional mitigation measures related to conformance with planning policies for the Town of Atikokan.

Township of Ignace: There are no additional mitigation measures related to conformance with planning policies for the Township of Ignace.

Unincorporated Townships/Rural Areas: Adhere to mitigation measures outlined in Table 7.1-38 and continue to engage with interest holders, regulators, agencies, private landowners, and Indigenous communities throughout the duration of the Project.

Net Effects

There is a predicted net change to land use policy and planning as a result of a need to change land uses to accommodate the Project footprint (e.g., on Crown and/or other public lands) during the construction, operation, and maintenance stages of the Project. Approvals and possible changes to policy (e.g., zoning) are expected to be required for Crown lands, other public lands that are transected by the Project footprint. This net effect is carried forward to the net effects characterization (Section 7.1.10).



7.1.9.2.2 Changes to Current Land Use

Project Effects

The Project ROW will transect Crown lands and private lands where residential developments, commercial (e.g., businesses, industrial, retail) and non-commercial (e.g., recreational) land use occurs. Project activities including site preparation, clearing, infrastructure construction, assembly and erection of structures, and maintenance activities along the ROW during the construction, operation, and maintenance phases of the Project have the potential to impact Crown lands and private lands located along the ROW and Project footprint. The Project will require Hydro One to obtain private land rights from 25 7 directly impacted landowners consisting of 230 privately held properties, 15 Crown properties, 8 municipally held properties and 4 railway crossings.

Changes to the public use of land in the Project study areas are addressed in Section 7.1.9.1 (Parks and Protected Areas), Section 7.1.9.6 (Hunting, Trapping and Fishing), Section 7.1.9.7 (Recreation and Commercial Tourism), and Section 7.1.9.8 (Navigation).

Land users and residents that own private lands that will be transected by the new ROW will be offered to enter into voluntary property settlements for the purpose of providing Hydro One rights to establish the new ROW across the land for the purpose of the Project. Hydro One is committed to working with private landowners to ensure no one is displaced from their home unless they qualify for and elect a property buyout.

Land users and residents that reside along the ROW may also be subject to periodic acoustic and visual disturbances (i.e., noise, vibrations, and changes to aesthetics). Potential impacts and associated mitigation measures related to the acoustic and visual environment are further discussed in Sections 6.9 (Acoustic Environment) and 7.4 (Visual Aesthetics).

Mitigation Measures

Hydro One has committed that it will not displace residences where the residents do not want to leave their home.

The project-specific Land Acquisition Compensation Principles for this Project are founded upon Hydro One's experience pertaining to land acquisition matters for new transmission projects. Hydro One will implement a Landowner Compensation Program for directly affected property owners to provide voluntary property settlements in a timely manner, to the extent practicable, for the portion of properties to be utilized for the Project. This will involve contacting directly affected property owners and meeting to review the project-specific Land Acquisition Compensation Principles that will guide land rights acquisitions. These Land Acquisition Compensation Principles will set out the process between Hydro One and property owners to conclude property settlements, including financial compensation to account for time invested in the lands right process and compensation to allow access for environmental surveys, studies, and land appraisals.





Damages for private land will also be pursuant to the Landowner Compensation Program and its associated policies. During construction, operation or maintenance, construction personnel will ensure that activities and equipment do not impact neighbouring properties, structures or operations. In the unlikely event that physical damages are incurred by a landowner, damages will be subject to financial compensation through Hydro One's existing compensation policies.

Hydro One will engage with the appropriate planning authority for land-use related permissions and permits for all areas, municipalities and unincorporated/unorganized Townships. This can include consultation with the applicable rural planning boards that encompass both small municipalities and unincorporated areas.

Further details about the mitigation measures to be implemented by Hydro One and its contractor have been outlined in Table 7.1-38.

Net Effects

There is a predicted net change to occupied and unoccupied Crown and private lands as a result of a need to change land uses to accommodate the Project footprint during the construction, and operation and maintenance stages of the Project. Approvals and possible changes to policy (e.g., zoning) are expected to be required for Crown lands, other public lands that are transected by the Project footprint (Section 7.1.9.2.1). While some nuisance effects may be mitigable, and direct effects to landowners and residents may be compensated for, it is expected that there will be residual effects to private lands in the form of loss of land use for some lands intersected by the Project footprint. This net effect is carried forward to the net effects characterization (Section 7.1.10).

7.1.9.3 Forestry Resource Use

This section provides details related to the potential effects, mitigation measures, and net effects related to forestry resource uses that may be impacted by the Project including existing forestry resources, forest processing facilities, and the availability/volume of current and planned forestry resources.

7.1.9.3.1 Changes to the Area and Access of Forestry Resources

Potential Effects

The Project will affect the availability of the forest resources through vegetation clearing within the Project footprint. Some areas of the Project footprint will be reclaimed and returned to a preconstruction condition while some areas will be permanently maintained such as the ROW and permanent access roads. Conservative estimates of forestry land which will be removed within the Project footprint have been calculated for the entirety of the Project footprint (refer to Table 7.1-20).

Six FMUs overlap the Project footprint including the Boundary Waters FMU, Dog-River Matawin FMU, the Dryden FMU, the English River FMU, the Lakehead FMU, and the Wabigoon WMU. The lands that overlap the Project footprint total 5,123.7 ha (or 0.1% of all FMU lands). The



Black Forest FMU does not overlap the Project footprint or the LSA (Table 7.1-20). Overall, the forestry resources affected within the Project footprint represent a minimal proportion of the total FMUs located in the LSA and RSA.

There is one forest processing facility located within the Project footprint located within the Thunder Bay Metropolitan Area. The forest processing facility is a small-sized sawmill (Table 7.1-21); however, the Project footprint component crossing this facility is an existing access road where no improvements are required. The overlap is due to the proximity of the road to the land parcel for the facility. Potential effects from the Project on this facility are limited to the potential increase in traffic along this road, which will be temporary.

Construction Stage: Project construction activities may temporarily reduce or limit access to certain portions of existing areas for identified landowners, lessees, and license holders. Unless otherwise directed by regulatory agencies, Hydro One does not anticipate requiring closure of any public roads during construction operations. Traffic control may be required from time-to-time which may cause short duration interruptions/delays to road users. Temporary road disturbances and restrictions will not be continuous, as construction will be completed using a staged approach. Access restrictions are expected to occur only within certain segments of the ROW, most heavily within the Project footprint. The Project will use existing road and trail infrastructure where practicable, in order to limit disturbances resulting from the construction of new access roads and trails, although new access roads constructed may alleviate some additional pressure on the roads.

Operations and Maintenance Stage: During operation, maintenance of access roads and waterbody crossings, and periodic inspection of the transmission line and associated infrastructure, and necessary repairs and vegetation management along the ROW, may also take place within the forest management units crossed by the Project footprint during the life of the Project. Vegetation management in previously forested areas will occur during the operation and maintenance phase in the permanent ROW in order to maintain transmission line integrity.

Such operation activities may result in restricted access near the areas of maintenance. These activities are expected to be infrequent. Additional access and crossing maintenance may be identified during post-construction monitoring.

Mitigation Measures

Hydro One and its contractor will implement the mitigation measures outlined in Table 7.1-38.

Hydro One will work with local communities and Forest Management Units to manage merchantable timber cleared by the Project. As part of the process to obtain an Overlapping Licence Agreement with each SFL-holder, Hydro One and/or their contractor will meet with each SFL holder to discuss:

- Harvest and utilization plans for merchantable and non-merchantable trees;
- Disposal plans for non-marketable trees and non-merchantable portions of trees;



- Available markets, product specifications and pricing for harvested timber;
- Wood supply commitments in accordance with SFL conditions;
- Use and maintenance of forest access roads;
- Potential synergies, or conflicts, in timing of operations with the SFL holder (e.g., road use and maintenance, timber harvest, wood haul);
- Disruption of recently renewed/established post-harvest areas; and
- Rehabilitation and regeneration of disturbed sites.

Hydro One and/or their contractor will also meet with non-SFL related wood facilities to discuss opportunities for harvested open market wood fibre, product specifications and pricing.

Hydro One will also develop a Clearing and Timber Salvage Plan that will be finalized in consultation with the SFL holder who will advise on the forest products that can be received by the mills. These will be agreed and included in the overlapping licence agreement that is a prerequisite to the Crown Forest Licence that must be obtained prior to the cutting of trees.

Net Effects

There is a net effect predicted in the form of changes to the area (ha) of available forestry resources, as well as access to forestry resources, after implementation of the mitigation measures described above. This net effect is carried forward to the net effects characterization (Section 7.1.10).

7.1.9.4 Mining Resource Use

This section provides details related to the potential effects, mitigation measures, and net effects related to mining resource uses that may be impacted by the Project including proximity to mining claims, active and planned (new) mines, mining infrastructure, and proximity to inactive (abandoned) mines.

7.1.9.4.1 Changes to the Area and Access of Mining Resources

Potential Effects

During the Project construction stage, site preparation, clearing, infrastructure construction, the assembly and erection of Project structures, and the transportation of construction workers, equipment, and materials will occur in areas with existing or potential mining resource use.

As described in Section 7.1.7.4 (Mining Resources), in the LSA there are a total of 6,737 (161,872.4 ha) total operational cell claims (made up of 6,690 active mining claims, 14 active pending proceedings, and 33 pending total claims), 183 operational alienations (active withdrawals), 164 mineral occurrences (made up of102 mineral occurrences, 17 prospects, 13 developed mineral prospects with reserves, 1 developed mineral prospect without reserves,



23 discretionary mineral occurrences, 2 past producing mines with reserves, 5 past producing mines without reserves, and one producing mine), and 42 abandoned mine sites.

In the Project footprint there are a total of 1,131 operational cell claims (made up of active mining claims), 41 operational alienations (active withdrawals), 3 mineral occurrences (made up of 2 mineral occurrences, and 1 prospect), and 1 abandoned mine site. There are no developed mineral prospects with reserves, developed mineral prospect without reserves, discretionary mineral occurrences, past producing mines with reserves, past producing mines with reserves, or producing mines.

Construction Stage: Project construction activities may temporarily reduce or limit access to certain portions of existing areas for identified landowners, lessees, and licence holders and claims holders. Intermittent, short-term closures may partially displace users both due to the activities occurring and in order to protect user safety.

Temporary road disturbances and restrictions will not be continuous, as construction will be completed using a staged approach. Access restrictions are expected to occur only within certain segments of the ROW, most heavily within the Project footprint. The Project will use existing road and trail infrastructure where practicable, in order to limit disturbances resulting from the construction of new access roads and trails, although new access roads constructed may alleviate some additional pressure on the roads.

Access to existing mining operations in the Project footprint and LSA may also be temporarily disrupted by Project-related increases in traffic and temporary road restrictions during the construction stage, should timing of construction and other resource use activities overlap. Intermittent, short-term road closures for clearing tower assembly, cable stringing, and cable splicing could also create the need for detours on roads that are also used for accessing lands, resources, and amenities beyond the preferred route ROW. Traffic-related nuisances would be most noticeable in the Project footprint but may be experienced within the LSA as well. The Project may limit the access of identified landowners, lessees, licence and claim holders, who partake in mining resource use activities in the Project footprint. The potential exists for the Project to temporarily affect the availability of mining resources.

Operations and Maintenance Stage: Existing commercial industry users including mining claim holders, operating within the Project footprint could be temporarily disrupted or access to affected areas. During operation, maintenance of access roads and waterbody crossings, and periodic inspection of the transmission line and associated infrastructure, and necessary repairs and vegetation management along the ROW, may also take place within the protected areas crossed by the Project footprint during the life of the Project. This vegetation management in previously forested areas within or adjacent to parks and protected areas will occur during the operation and maintenance phase in the permanent ROW in order to maintain transmission line integrity.



Such operation activities may result in restricted access near the areas of maintenance. These activities are expected to be infrequent. Additional access and crossing maintenance may be identified during post-construction monitoring.

Mitigation Measures

Hydro One and its contractor will implement the mitigation measures outlined in Table 7.1-38.

Net Effects

There is a net effect predicted in the form of changes to the area (ha) of available mining resources, as well as access to mining resources, after implementation of the mitigation measures described above. This net effect is carried forward to the net effects characterization (Section 7.1.10).

7.1.9.5 Aggregate Resources

This section describes potential effects, mitigation measures, and net effect related to aggregate resources that may be impacted by the Project including existing aggregate resources, areas of high aggregate potential, as well as the availability/volume of current aggregate resources.

7.1.9.5.1 Changes to the Area and Access of Aggregate Resources

Potential Effects

The Project is predicted to displace some aggregate resources in the Project footprint indefinitely. The potential also exists for the Project to temporarily affect access/availability of these resources. The Project will also require various types of aggregates, including engineered aggregate for the construction of access roads or trails, and for concrete mixing. The total quantity of aggregate required will be determined during the detailed planning stage. As described in Section 3.3.11 (Aggregate Pits), aggregate pits will be developed to support the Project.

Specifically, within the Project footprint there is 642.6 ha of aggregate designated areas, 36 (70.8 ha) active aggregate sites, 11 (14.0 ha) inactive aggregate sites, 4 forestry aggregate pits (area not available), and ten MTO aggregate pits (144.71 ha). The total number of aggregate pits in the Project footprint was 61 with a total area of 772.1 ha (including aggregate designated areas, within the LSA there is 58,178.2 ha of aggregate designated areas, 100 (2,896.2 ha) active aggregate sites, 28 (102.8 ha) inactive aggregate sites, 57 forestry aggregate pits (area not available), and 38 MTO aggregate pits (1,250.4 ha). The total number of aggregate pits in the LSA was 223 with a total area of 62,427.6 ha (including aggregate designated areas.

However, aggregate resource features and tenures transected by the Project footprint (both actively used and with the potential for future use) represent a minimal proportion of the existing aggregate resources available within the LSA and RSA.



Construction Stage: Construction activities and associated safety considerations have the potential to temporarily restrict access to other aggregate resource users from extracting or harvesting resources from the Project footprint.

Access to existing aggregate operations in the LSA may also be temporarily disrupted by Project-related increases in traffic and temporary road restrictions during the construction stage, should timing of construction and other resource use activities overlap.

Extraction from active aggregate pits may be disrupted or forgone during the construction stage, and the removal of the Project footprint from the land base has the potential to eliminate future yields in this area. Project activities during the construction phase could potentially affect existing and future aggregate production.

Operations and Maintenance Stage: Operation activities and associated safety considerations including the maintenance of access roads and waterbody crossings, and periodic inspection of the transmission line and associated infrastructure, and necessary repairs and vegetation management along the ROW have the potential to temporarily restrict other aggregate resource users from extracting or harvesting resources from the Project footprint.

Such operation activities may temporarily restrict access and aggregate resource users from extracting or harvesting resources near the areas of maintenance. These activities are expected to be infrequent; however, there is overlap of the Project footprint and aggregate resource areas (i.e., 21 aggregate pits) where existing aggregate production may be affected. Additional access and crossing maintenance may be identified during post-construction monitoring.

Mitigation Measures

Hydro One and its contractor will implement the mitigation measures outlined in Table 7.1-38.

Net Effects

There is a net effect predicted in the form of changes to the area (ha) of available aggregate resources as well as access to aggregate resources, after implementation of the mitigation measures described above. This net effect is carried forward to the net effects characterization (Section 7.1.10).

7.1.9.6 Hunting, Trapping, and Fishing

This section describes potential effects, mitigation measures, and net effects related to hunting, trapping, and fishing – including changes in access to lands and/or waterbodies available for associated activities.

7.1.9.6.1 Changes to Area and Access to Hunting, Trapping, Fishing, and Associated Activities

Potential Effects

The Project is designed to maximize alignment with existing infrastructure corridors to reduce disturbances to the natural environment natural, including areas located within the Project footprint which may be utilized for hunting, trapping, fishing, and associated activities. To further



avoid disturbances to hunting, trapping, fishing, and associated activities within the LSA, existing access roads and trails will be used to the extent practicable to limit disturbances to the landscape. The Project footprint overlaps:

- Ten WMUs (5,124.5 ha);
- 28 trapline license (regular registered licenses) and 20 structures located within the 46 trapline license areas (4,758.3 ha);
- Portions of three FMZs (<0.1% of each);
- 42 Bait Harvest Areas (5,123.7 ha);
- One fish sanctuary (Crowrock Lake) (0.6 ha) and
- Six trout-bearing lakes: Balmoral Lake, Crowrock Lake, Elsie Lake, Forsberg Lake, Mabel Lake, and Nym Lake.

As presented in Table 7.1-26 and Table 7.1-32, this information demonstrates that the overlap between the Project footprint for the Project and hunting, trapping, and fishing areas will be low overall compared to the total areas and features available in the LSAs (less than 0.1% for WMUs and less than 1% for FMZs), meaning that restricted Project footprint access will not noticeably remove opportunities for these activities to occur at the LSA level, although some individual users (i.e., resource users who utilize traplines) may be more broadly affected.

Construction Stage: The construction stage is expected to overlap with peak hunting, trapping, and fishing seasons for both resident and non-resident hunters and anglers. Site preparation, clearing, grubbing, the construction of infrastructure, the assembly and erection of transmission structures, and the transportation of construction workers, equipment, and materials may occur within areas also used for hunting, trapping, fishing and associated activities. Project construction activities may temporarily reduce or restrict access to lands used for hunting, trapping, and fishing, as the Project construction progresses along the Project footprint. It is anticipated that hunters, trappers and fishers will be partially displaced from land and amenities in these affected areas.

Trappers registered to trapline license areas that overlap with the Project footprint or ROW have the potential to be impacted during construction by the permanent removal of forested lands, as forested lands are incompatible with the presence of the ROW. Permanent changes to mature forested habitat have the potential to impact the productivity of the affected traplines including those listed in Table 7.1-31. Temporary access restrictions experienced during the construction stage will not be continuous in nature, as construction across the alignment will be completed using a staged approach for a few weeks to a few months within the larger construction schedule, as Project construction progresses along the ROW.

Temporary access restrictions will occur in certain areas of lands and features utilized for fishing a few weeks to a few months while active construction is ongoing in that particular segment of



the Project alignment, before construction moves to another segment along the linear corridor. Disturbances are predicted to be intermittent, rather than continuous across the entire Project footprint for the entire construction stage. Additionally, there are a range of lands and features utilized for fishing features throughout the LSA available that provide users with options to access similar areas.

Formal roads could experience increased traffic or limitations during the Project's working hours, but other roads and other access features may also experience restrictions through short-term closures.

During construction, while alteration of existing hunting, trapping, and fishing land areas may occur, there is also the potential for increased access to result in an increase in the number of harvesters, potentially generating increased hunting and fishing along the ROW and through the addition of any new access roads.

Operations and Maintenance Stage: During operation, maintenance of access roads and waterbody crossings, and periodic inspection of the transmission line and associated infrastructure, and necessary repairs and vegetation management along the ROW, may also take place within existing hunting, trapping, and fishing land areas crossed by the Project footprint during the life of the Project. Vegetation management will occur during the operation and maintenance phase in the permanent ROW in order to maintain transmission line integrity.

Such operation activities may result in temporary restricted access to hunting, trapping, and fishing land areas near the areas of maintenance. These activities are expected to be infrequent and additional access and/or crossing maintenance may be identified during post-construction monitoring to allow for continued or alternative use by land users. As well, during operation, audible noise may be perceptible from maintenance activities or from the transmission line when a small amount of electrical energy within the conductor interacts with the air surrounding the conductor surface. Therefore, there is a chance that the Project will produce some noise under foul weather conditions (e.g., rain, fog, snow, and frost), but this noise will not likely be higher than ambient noise conditions beyond the ROW (see Section 6.9). Increased noise levels may infrequently impact land users who participate in hunting, trapping, and fishing activities within the Project footprint.

Additional information related to the potential effects, mitigation measures, and net effects related to navigation, which could also impact ability to fish during construction and operation are outlined in Section 7.1.9.8 (Navigation).

Mitigation Measures

Hydro One and its contractor will implement the mitigation measures outlined in Table 7.1-38.

Net Effect

There is a net change to area and access to hunting, trapping, fishing and associated activities predicted after implementation of the mitigation measures described above. This net effect is carried forward to the net effects characterization (Section 7.1.10).



7.1.9.7 Recreation and Commercial Tourism

This section describes potential effects, mitigation measures, and net effects related to impacts on recreation and commercial tourism including impacts to outpost camps, cabins, cottages and campgrounds, recreational trails and access points, canoe routes, backcountry campsites, shore launch sites, boat launches, and golf courses.

Additional discussion regarding potential effects and mitigation in relation to aquatic recreation is provided in Section 7.1.9.8 (Navigation).

7.1.9.7.1 Changes to the Quantity and Quality of Lands Available for Recreation and Commercial Tourism Activities

Potential Effects

Formal and tertiary roadways, terrestrial and aquatic trails and trailheads, aquatic access points and private and commercial boat caches are considered recreation and commercial tourism features themselves, and also provide a means to access other recreation and commercial tourism features. Recreation and commercial tourism features are used by individual land users, and also by guided outfitters and tourism operators and are important to the local outdoor recreation and commercial tourism industry in the LSA.

Trails and Access Restrictions

As set out in Section 7.1.7.7.2.1 (Recreational Trail Use), the Project footprint transects seven OTN trails (for 3.1 km) and 105 non-OTN trails (for a combined 157.3 km). The majority of OTN trails in the Project footprint are for hiking or waking, cycling, crossing country skiing (1.2 km) and paddling (1.1 km), while the majority of non-OTN trails include snowmobile (47.1 km), ski (5.8 km), bike (1.5 km), and resource user trails (8.1 km).

Construction Stage: During Project construction, temporary disturbances to recreation and commercial tourism features will be most prominent where the features are transected by the Project footprint, especially for features that experience closures or access restrictions during periods of active Project construction and/or operation.

Use of these trails is likely to be temporarily interrupted during construction, though the level of nuisance effects that will occur may vary depending on the time of year of the construction in a given area. Certain specific secondary roads may also experience short term intermittent closures due to Project clearing, infrastructure construction and assembly, blasting, the operation of construction equipment, the construction of new waterbody crossings, cable stringing, or other construction activities, in order to promote worker and public safety.

Although access and use of these roadways, trails and related access features may face temporary restrictions during the construction stage, these disturbances will not be continuously in effect for the entire construction stage across the entire Project footprint, as construction will be completed using a staged approach. Therefore, disturbances would be intermittent, rather than experienced continuously across the entire Project footprint for the entire construction



stage. Temporary access restrictions will only be put in place for a few weeks to a few months within the larger construction schedule, as Project construction progresses along the ROW.

Operations and Maintenance Stage: During operation, maintenance of access roads and waterbody crossings, and periodic inspection of the transmission line and associated infrastructure, and necessary repairs and vegetation management along the ROW, may also take place where recreational and commercial tourism features (i.e., OTN, non-OTN trails, and resource use trails) are crossed by the Project footprint during the life of the Project. Vegetation management in previously forested areas within or adjacent to recreational and commercial tourism features will occur during the operation and maintenance phase in the permanent ROW in order to maintain transmission line integrity.

Such operation activities may result in restricted access near the areas of maintenance. These activities are expected to be infrequent. Additional access and crossing maintenance may be identified during post-construction monitoring.

As well, during operation, audible noise may be perceptible from maintenance activities or from the transmission line when a small amount of electrical energy within the conductor interacts with the air surrounding the conductor surface. Therefore, there is a chance that the Project will produce some noise under certain weather conditions (e.g., rain, fog, snow, and frost), but this noise will be infrequent and not likely to be higher than ambient noise conditions beyond the ROW (see Section 6.9).

These access restrictions will occur only within certain areas where recreational and commercial tourism features are present, most heavily for those that are located within the Project footprint. However, the overlap between the Project footprint and recreational and commercial tourism features is low, and therefore, access restrictions within these areas are anticipated to be minor within the Project footprint.

Camping, Commercial Tourism, and Recreational Infrastructure

Section 7.1.7.7.2.2 (Camping, Commercial Tourism, and Recreational Infrastructure) identifies that the Project footprint intersects with three cottage sites (not remote) with a total area of <1 ha, one designated camping site (area unavailable), and one outpost camp with an area of <1 ha (MNRF 2022h). There is one horse riding stable with an area of <1 ha and one main base lodge with an area of <1 ha in the Project footprint (MNRF 2022h). Thus, these lands may be directly impacted by the Project.

There are a range of recreation and commercial tourism features in the LSA, which may provide users with alternative recreational services in the event that recreation and commercial tourism features crossed by the Project footprint are temporarily inaccessible. Additional traffic controls may be required from time-to-time, causing short duration interruptions/delays to road users; however, long-term access to public roads by local businesses, tourism operators, and land users are not anticipated.



There are no designated picnic or camping sites, recreational or youth camps in the Project footprint (MNRF 2022h); thus, no such features are expected to be directly impacted.

In addition to direct effects, recreationists and tourists may be affected indirectly by nuisance effects such as noise or vibrations, that ruin the enjoyment of the recreational of commercial tourism features.

Construction Stage: During Project construction, temporary disturbances to recreation and commercial tourism features (i.e., cottages, camps, lodges, etc.) will be most prominent where the features are transected by the Project footprint, especially for features that experience closures or restrictions during active Project construction and/or operation.

Use of these trails is likely to be temporarily interrupted during construction, though the level of nuisance effects that will have may vary depending on the time of year of the construction in a given area. Certain specific secondary roads may also experience short-term intermittent closures due to Project clearing, infrastructure construction and assembly, use of explosives (if blasting is required), the operation of construction equipment, the construction of new waterbody crossings, cable stringing, or other construction activities, in order to promote worker and public safety.

Although access and use of these roadways, trails and related access features may face temporary restrictions during the construction stage, these disturbances will not be continuous throughout the entire construction stage across the entire Project footprint, as construction will be completed using a staged approach. Therefore, disturbances would be intermittent, rather than continuous across the entire Project footprint for the entire construction stage. Temporary access restrictions will only be put in place for a few weeks to a few months within the larger construction schedule, as Project construction progresses along the ROW.

These access restrictions will occur only within certain areas where recreational and commercial tourism features are present, most heavily for those that are located within the Project footprint. However, the overlap between the Project footprint and recreational and commercial tourism features is low, and therefore, access restrictions within these areas are anticipated to be minor within the Project footprint.

Operations and Maintenance Stage: During operation, maintenance of access roads and waterbody crossings, and periodic inspection of the transmission line and associated infrastructure, and necessary repairs and vegetation management along the ROW, may also take place where recreational and commercial tourism features are crossed by the Project footprint during the life of the Project. Vegetation management in previously forested areas within or adjacent to recreational and commercial tourism features will occur during the operation and maintenance phase in the permanent ROW in order to maintain transmission line integrity.



Such operation activities may result in temporarily restricted access near the areas of maintenance. These activities are expected to be infrequent. Additional access and crossing maintenance may be identified during post-construction monitoring.

As well, during operation, audible noise may be perceptible from maintenance activities or from the transmission line when a small amount of electrical energy within the conductor interacts with the air surrounding the conductor surface. Therefore, there is a chance that the Project will produce some noise under foul weather conditions (e.g., rain, fog, snow, and frost), but this noise will not likely be higher than ambient noise conditions beyond the ROW (see Section 6.9).

Increased Access

Potential Project effects on land use access are anticipated in relation to the establishment of a permanent, 46 m wide transmission line ROW, and in relation to the construction of new access roads. Although the transmission line ROW and new access roads will be used by the Project workforce during some part of the construction stage, construction activities are staged. Therefore, as construction progresses to new areas along the alignment, outdoor tourism and recreational land users will gain general public access to these new access roads, which could be used for snowmobiling, ATVing, walking, hiking, wildlife viewing, hunting, trapping, fishing and other activities. The introduction of the additional access roads is predicted to effectively increase net land availability and access within the recreation and commercial tourism users or expanding access to a broader range of individuals and groups. Recreational activities, including snowmobiling, are not permitted on Hydro One ROWs unless it is agreed to by the property owner and deemed compatible by Hydro One.

As a result of Project construction, activities may temporarily reduce or limit access to certain portions of existing areas with intermittent, short-term closures, partially displacing users both due to the activities occurring and in order to protect user safety. Therefore, some tourism establishment areas may be impacted by construction due to access limitations. However, as set out in Section 7.1.7.7 (Recreation and Commercial Tourism), a limited number of tourism establishment areas and recreational infrastructure is located with the Project footprint compared to the LSA.

During construction and operation, increased access may encourage an influx of hunters, trappers, anglers, snowmobilers, ATV users, hikers and other land users to areas that were previously inaccessible, unused, or used by a limited number of land users. Increased access may result in an increase in recreation and commercial tourism pressures in the vicinity of the new access roads. There are numerous accessible areas in northwestern Ontario and within close proximity to the City of Thunder Bay, City of Dryden and Town of Atikokan, such that it is anticipated that there would only be a low number of recreational or tourism land users travelling to the proposed Project to find additional suitable locations.

New ROW and access road access might provide opportunities for users to reach terrestrial and surface water areas that were previously inaccessible or more challenging to reach. Guided



outfitters and tourism establishment areas may lose uncompetitive or select access to certain areas of the LSA or experience a perceived decrease in the level of remoteness in areas of existing use, due to increased access and use of other outdoor tourism and recreational users.

Construction Stage: During Project construction, temporary disturbances to recreation and recreational and/or commercial tourism features will be most prominent where the features are transected by the Project footprint, especially for features (i.e., trails, camps, outfitters, etc.) that experience closures or restrictions during active Project construction and/or operation.

Certain specific secondary roads, trails, and related access features may also experience shortterm, intermittent (temporary) closures or restrictions due to Project clearing, infrastructure construction and assembly, use of explosives (if blasting is required), the operation of construction equipment, the construction of new waterbody crossings, cable stringing, or other construction activities, in order to promote worker and public safety.

These disturbances will not be continuous for the entire construction stage across the entire Project footprint, as construction will be completed using a staged approach; however, the level of nuisance effects that will have may vary depending on the time of year of the construction in a given area. Temporary access restrictions will only be put in place for a few weeks to a few months within the larger construction schedule, as Project construction progresses along the ROW.

Operations and Maintenance: During operation, maintenance of access roads and waterbody crossings, and periodic inspection of the transmission line and associated infrastructure, and necessary repairs and vegetation management along the ROW, may also take place where recreational and commercial tourism features are crossed by the Project footprint during the life of the Project. Vegetation management in previously forested areas within or adjacent to recreational and commercial tourism features will occur during the operation and maintenance phase in the permanent ROW in order to maintain transmission line integrity.

Such operation activities may result in restricted access near the areas of maintenance. These activities are expected to be infrequent. Additional access and crossing maintenance may be identified during post-construction monitoring.

During operation, there is a chance that the Project will produce some noise under foul weather conditions (e.g., rain, fog, snow, and frost), but this noise will not likely be higher than ambient noise conditions beyond the ROW (see Section 6.9).

Mitigation Measures

Hydro One and its contractor will implement the mitigation measures outlined in Table 7.1-38.

Net Effects

There is a net change in area and access to recreational and commercial outdoor tourism predicted after implementation of the mitigation measures described above. This net effect is carried forward to the net effects characterization (Section 7.1.10).



7.1.9.8 Navigation

This section describes potential effects, mitigation measures, and net effects related to navigation including impacts to the quantity and quality of navigable watercourses and watercourse crossings.

7.1.9.8.1 Changes to the Area and Access of Navigable Watercourses, Watercourse Crossings, and Navigation

Potential Effects

Equipment or waterbody crossing structures may impede or be a hazard to navigation during the construction phase, and possibly during operation and maintenance phase if such structures are permanent. This is expected to occur on formal roadways and aquatic trails/canoe routes crossed by the Project footprint. Within the Project footprint, there are 1.6 kms total of OTN trails classified as "paddling", "paddling/portaging", or "portaging" aquatic trails/canoe routes which may be used for navigation. There are 0.8 km of non-OTN aquatic trails/canoe routes which are classified as "snowmobile/portage", or "canoe route" located in the Project footprint which may be used for navigation.

Aquatic trails and/or canoe routes which are located within the Project footprint have the potential to be impacted by construction, operation, and/or maintenance activities associated with the Project.

Other aquatic recreation features are not expected to be impacted. No recreation access points (i.e., trailheads) or private or commercial boat caches have been identified in the Project footprint (MNRF 2022h). Within the LSA there are 46 boat caches, though it is not anticipated that these will be directly affected (MNRF 2022h).

Construction Stage: It is anticipated that regulatory approval, or notification, under the *Canadian Navigable Waters Act* will be required if scheduled navigable waters are crossed by the Project and may be required at non-scheduled navigable waters.

During Project construction, temporary disturbances to aquatic trails/canoe routes will be most prominent where the features are transected by the Project footprint, especially for features that experience closures or restrictions during active Project construction and/or operation.

Use of aquatic trails/canoe routes are likely to be temporarily interrupted during construction, through the level of nuisance effects that it will have may vary depending on the time of year of the construction in a given area. Aquatic trails/canoe routes located within the Project ROW may also experience short-term intermittent closures due to Project clearing, infrastructure construction and assembly, use of explosives (if blasting is required), the operation of construction equipment, the construction of new waterbody crossings, cable stringing, or other construction activities, in order to promote worker and public safety.

Although access and use of aquatic trails/canoe routes, and related access features may face temporary restrictions during the construction stage, these disturbances will not be continuously



in effect for the entire construction stage across the entire Project footprint, as construction will be completed using a staged approach. Therefore, disturbances would be intermittent, rather than continuous across the entire Project footprint for the entire construction stage. Temporary access restrictions will only be put in place for a few weeks to a few months within the larger construction schedule, as Project construction progresses along the ROW.

Operations and Maintenance Stage: During operation, maintenance of access roads and waterbody crossings, and periodic inspection of the transmission line and associated infrastructure, and necessary repairs and vegetation management along the ROW, may also take place where aquatic trails/canoe routes are crossed by the Project footprint during the life of the Project. Vegetation management in previously forested areas within or adjacent to aquatic trails/canoe routes will occur during the operation and maintenance phase in the permanent ROW in order to maintain transmission line integrity.

Such operation activities may result in restricted access near the areas of maintenance. These activities are expected to be infrequent. Additional access and crossing maintenance may be identified during post-construction monitoring.

During construction, there is a chance that the Project will produce some noise under foul weather conditions (e.g., rain, fog, snow, and frost), but this noise will not likely be higher than ambient noise conditions beyond the ROW (see Section 6.9).

These access restrictions will occur only within certain areas where aquatic trails/canoe routes are present, most heavily for those that are located within the Project footprint. However, the overlap between the Project footprint and recreational and commercial tourism features is negligible, and therefore, access restrictions within these areas are anticipated to be minor within the Project footprint.

Mitigation Measures

Hydro One and its contractor will implement the mitigation measures outlined in Table 7.1-38.

Net Effects

There is a net effect predicted in the form of changes to navigation and navigation safety, after implementation of the mitigation measures described above. This net effect is carried forward to the net effects characterization (Section 7.1.10).

7.1.9.9 Summary of Potential Effects, Impact Measures, and Predicted Net Effects

Table 7.1-38 provides a summary of the Project-environment interactions assessment and mitigation measures.







Project Component or Activity	Potential Effect	Mitigation Measures
Provincial Parks, Conservation Reserves,	Changes to protected	Construction Stage:
ANSIS, Enhanced Management Areas	areas.	 Within the Campus Lake Conservation Area, there will be no disturbance to th the outlet of Mable Lake.
Project activities during the construction stage:		 Existing access roads and trails will be used to the extent practicable to limit d resulting from the construction of new access roads.
 Surveying and staking; 		• Access roads will be designed to minimize reversing (use of backup beepers)
 Clearing, grubbing and grading the ROW; 		residential areas, while in parks and/or protected areas should be designed to
 Construction of access roads, watercourse crossings, laydown areas, and construction camps: 		other stakeholders along the ROW will be notified of the planned construction construction activities.
 Equipment and material delivery. 		To minimize future potential access development impacts, some access roads
 Tower structure foundation installation; 		industrial operations (e.g., forestry operations).
 Tower structure assembly and erection; 		• The Project will implement an Access Plan that will set out the plan to access
 Conductor stringing and installation; 		entrance approaches, water crossings, and temporary workspaces within the I
 Clean-up and restoration; and 		 The number, location, and characteristics of existing and proposed new acces Project will be refined through detailed planning work and through consultation
 Testing and commissioning. 		government officials and agencies, and interested persons and organizations.
Project activities during the operation and maintenance stage:		 Restore temporary construction access roads and areas that are being used or construction, such as laydown areas, pull sites, and helipads, that are located lands. Where necessary, sediment and erosion control measures will be imple
• Structure climbing and helicopter inspections;		temporary structures like access roads, watercourse crossings, laydown areas
 Line hardware and insulator thermography; 		 remporary laydown areas and temporary construction camps will not be locate protected areas.
 ROW inspections; 		 During construction, the ROW will be approximately 46 m in width and construction
 Visual ground patrol; 		to surveyed and marked areas. Existing roads or trails that connect to the Proj
 Vegetation management; 		(Including access along adjacent existing transmission line or utility corridors) a require upgrades or improvements. Unless an existing access trail currently existing access trail currently existing access trail currently existence of the second
 On-going repairs and maintenance activities; 		using the Project's ROW is preferred for new access development. However, v
 Removal of towers, transmission line cables, insulators, and other hardware; and 		heavy equipment is not possible due to terrain, ground conditions or environm in the existing ROW will be developed as appropriate.
 Ground reclamation. 		 Vegetation clearing will consist of cutting tree trunks parallel to, and within 15 well as the removal of shrubs, debris, and other such materials. Grubbing may of the ROW. In these areas, vegetation will be removed manually, using chain equipment, while leaving the under growth and duff layer undisturbed to prevent.
		 In the event there are no existing roads or trails that connect to the ROW, new appropriate permits or authorizations prior to construction, as applicable. New crossings will be designed and constructed in accordance with municipal, prov
		 The number of towers in provincial parks will be minimized by spacing them at possible.
		 Transformer stations will operate in accordance with an Environmental Compli Environmental Activity Sector registration.
		 Blasting and the storage of materials and equipment within parks and protecte reasonably possible.
		 Construction water sources, methods of accessing water and volume of water confirmed during detailed planning and will be conducted in accordance with a requirements.

Table 7.1-38: Potential Effects, Mitigation Measures, and Predicted Net Effects for Non-Indigenous Land and Resource Use Criteria

	Net Effect
ne weir and remnant sluice at	 Net changes to protected areas.
disturbances to park access	
in close proximity to minimize disturbance to the ommunities, landowners, and schedule before the start of	
s may be permanently left in iple use/integration with other	
new or existing roads, Project scope.	
ss roads to be used for the n with Indigenous communities,	
on a temporary basis during l on previously undisturbed emented for areas for the s, and construction camps.	
ted within provincial parks or	
uction activities will be limited ject ROW may be used and in some cases may xists on the existing ROW, where travel in the ROW with nental sensitivities, new access	
cm of the ground or lower, as y be required along some parts n saws and other hand-held ent erosion.	
v roads may be built, with the access roads and waterbody vincial, and federal guidelines.	
t the maximum distance	
liance Approval or	
ed areas will be avoided where	
r for concrete production will be applicable regulatory	



Project Component or Activity	Potential Effect	Mitigation Measures
		 Water used for dust suppression will be brought to the site by tanker truck. Per necessary.
		 Work will be scheduled in wet areas during frozen conditions, where reasonab cultural, and recreational values will be marked clearly (e.g., rare vegetation co significant wildlife habitat) and associated setbacks will be established, Project that are flagged or fenced and abide by restrictions on in/out privileges.
		 If excessive rain, wet weather, or flood-like conditions occur or are anticipated, measures will be implemented as appropriate: re-schedule work or reduce/det are prone to rutting; restrict construction traffic, where feasible, to equipment w or wide pad tracks; during extreme wet conditions, work only in low-risk areas, well-sodded lands, until conditions improve; limit vehicle access through soft/w frozen conditions occur (i.e., early morning or evening); crews are to park in a site equipment if feasible; install access or swamp matting in sensitive areas to fencing or other methods of erosion control will be installed.
		 Sediment and erosion control measures will be installed prior to commencing or required, to reduce the potential for water runoff to carry soil and other sedime or sensitive environmental areas.
		 Waste will be appropriately stored, transported, and disposed of according to a federal laws and regulations.
		 A Traffic Management Plan will be developed for the Project prior to the start of will be shared with local municipalities as necessary. Potentially affected stake regarding the placement of permanent fencing and gates.
		 Hydro One is currently considering site-specific mitigation measures for the us cross Quetico Provincial Park and will confirm their appropriateness through fu Ontario Parks during the draft EA process. Mitigation measures under conside Construction vehicles will not use Ontario Parks parking lots; Modification of speed limits for construction vehicles; and Warning signage.
		 Indirect effects on land use quality in parks and protected areas will be reduce mitigation measures applied to the biophysical criteria as described in other set
		 Multiple contingency and management plans will be developed for the Project Protection Plan to be developed for the Project. For example, a Vehicle and Eq Maintenance, and Refueling Plan. Additionally, a Permits and Approval Plan p general project permits and the approval process, including any renewal proce A Timber Salvage Plan developed for the Project will set out the permits needer and timber management practices.
		 To support ongoing park use, signs will be installed on the ROW indicating par access points to park users. Construction routes will be designed to avoid key parks and protected areas to the extent practicable, in engagement with parks administrators. Signage will also be used to notify road users of road closures, disturbances to local roadways.
		 The Project will utilize a Communications Plan, which will set out standards reproject updates and community relations, such as providing advance notice of provided to park users through formal notification in local newspapers and at pentrances). A minimum 48-hour notification in advance of major activities communities, directly affected landowners, or as otherwise required Details of construction activities/schedule will be made available via the Hydrometry and the standards and the standards and the standards are available via the Hydrometry and the standards are provided to park users through formal notification in advance of major activities communities are provided to park users and at pentrances.
		 The Communications Plan will also establish the communications protocols for communications with Indigenous communities, project stakeholders, rightshold This can include consulting with park and conservation administrators to imple

	Net Effect
ermits for this will be acquired, if	
bly possible. Known natural, communities, wetlands, ct personnel will avoid areas	
d, the following contingency stour traffic in areas where soils with low-ground pressure tires s, such as well-drained soil or wet areas to periods when a stable area and walk to on- to protect soils; if required, silt	
construction activities, where ent into nearby water features	
applicable provincial and	
of construction activities and eholders will be engaged	
se of an existing access road to further engagement with eration at this location include:	
ed by implementing the ections of this EA. t as part of the Environmental Equipment Operation, provides an overview of the esses and permit consultation. ded, the ROW clearing process,	
ark boundaries and alternate access roads/entrances to and protected area are closures, and other	
egarding communications on of construction activities will be park locations (e.g., park mencing will be provided to red by permits/approvals. o One project website.	
or both formal and informal lders, and other organizations. ement appropriate restriction	

Final Environmental Assessment Report for the Waasigan Transmission Line Section 7.1 Land and Resource Use November 2023



Project Component or Activity	Potential Effect	Mitigation Measures	Net Effect
		protocols during maintenance activities in parks and protected areas to avoid or reduce effects to perceptions of land quality by park users.	
		 Additionally, the Project will engage with Indigenous communities as it relates to natural, cultural, and recreational resources in provincial parks and conservation reserves. 	
		 The Project will work with parks administrators and the MNRF during both construction and operation to implement appropriate restriction protocols within affected parks and protected areas as required. Work will be completed within the existing provincial park management plans and conservation reserve management statements and seek to promote user access while maintaining user safety. 	
		 Additionally, the Project will continue to consult with the MNRF, Indigenous communities, and/or trail and canoe route operators to develop appropriate strategies to facilitate continued, uninterrupted use and access to natural, cultural, and recreational values. Potentially affected stakeholders will be engaged about the placement of permanent fencing and gates as applicable. 	
		 Hydro One will plant seedlings along new off-ROW access roads in conservation reserves and provincial parks (limited to roads that require new clearing and new construction). Where existing roads and trails are used, these areas will be reclaimed to their pre-existing condition to the extent practicable. In addition, Hydro One will plant seedlings in the one temporary helicopter pad within the Campus Lake Conservation Reserve following construction. 	
		 New, on-ROW trails will be reclaimed, and topsoil will be rolled back over the reclaimed road. Areas that are subject to erosion, and waterbody crossing locations that have been removed after construction will all be seeded in accordance with MNRF, or other applicable regulatory agency, requirements to promote plant species establishment during reclamation, as soon as feasible after construction. 	
		 The reclaimed on-ROW access road will naturally vegetate along with the remainder of the right-of-way and will be managed to support vegetation that is compatible with the safe operation of the transmission line. 	
		• To reduce impacts on canoe routes and portages, vegetation clearing around important canoe routes and associated portages will be limited to where necessary for safety. Compatible vegetation will be retained where practical to meet regulatory requirements and minimize visual disturbance from activities, maintain visibility of portage on either side of the ROW and access roads for recreational user accessibility, keep portages cleared of vegetation debris, and maintain the existing grade of the portage in a manner that is safe for recreational users. Hydro One will continue to consult with the MNRF and Environment and Climate Change Canada (ECCC) on sensitive ecological features, wildlife, migratory birds, and species at risk. Additional mitigation measures for wildlife and wildlife habitat described in Section 6.5.7 will be implemented.	
		 The environmental and safety orientation program developed and implemented by the Project will also include information about wildlife and species at risk awareness. 	
		 Hydro One will work with FMUs to manage merchantable timber cleared by the Project. 	
		 Local municipal noise by laws and the MECP Model Municipal Noise Control Bylaw (i.e., NPC-115) will be complied with including making sure equipment used is well maintained and operated so as not to exceed the Health Canada Noise Guidance and MECP NPC-300 noise guideline on ambient noise levels. 	
		 Vehicles and equipment will be operated such that impulsive noise are minimized including turning off vehicles and equipment; and minimizing reversing where possible, reasonable, and practicable. 	
		 Noise concerns will also be further addressed as they arise through a complaint resolution mechanism where Hydro One can be contacted if there are perceived noise issues. 	
		 Construction activities will also typically occur during one 10-hour shift per day, generally within the daytime period (i.e., 07:00 to 18:00). Nighttime construction work is generally not anticipated; however, it may be required in specific circumstances. 	
		 In the event construction will occur beyond the daytime period, Hydro One, with its contractors will review mitigation measure requirements. Noise concerns will be addressed as they arise through a complaint resolution mechanism whereby individuals can contact Hydro One if issues arise. 	



Project Component or Activity	Potential Effect	Mitigation Measures
		Operation and Maintenance Stage:
		• Operations and maintenance activities within the Campus Lake Conservation the weir and remnant sluice at the outlet of Mable Lake as disturbance in this
		 It is the preference to use the Project's ROW; however, where travel in the RC not possible due to terrain, ground conditions or environmental sensitivities, en connect to the Project ROW may be used (including access along adjacent ex utility corridors) and in some cases may require upgrades or improvements.
		 Indirect effects on land use quality in parks and protected areas will be reduce mitigation measures applied to the biophysical criteria as described in other se implemented.
		 The Communications Plan will establish the communications protocols for bot communications with Indigenous communities, project stakeholders, rightshol This can include consulting with park and conservation administrators to imple protocols during maintenance activities in parks and protected areas to avoid perceptions of land quality by park users.
		 The Project will work with parks administrators and the MNRF during construct maintenance activities to implement appropriate restriction protocols within aff areas as required.
		 Hydro One will work with FMUs to manage merchantable timber cleared by th merchantable value will be felled, de-limbed, mulched, or piled at the edge of contract requirements.
		 During operation and maintenance, the Project will follow standards that can s the removal of any non-compatible vegetation from the ROW.
		 Maintenance will be performed to Hydro One's vegetation standard. Vegetation standing and falling clearance distances to the conductor will be addressed by Clearance distances align with the NERC Vegetation Management standard F vegetation clearance distance required to prevent flashover.
		 Small trees and branches will be dispersed on the ROW or piled and burned of Forest Fires Prevention Act and Regulation 207/96 Outdoor Fires under this A
		 Slash and debris resulting from mechanical clearing operations will be spread exceed 0.3 m or will be piled and burned. Slash and debris windrows are not they are required the windrows will be left open at all roads or access trails, al wetlands and watercourses to provide access for wildlife not capable of crossi windrows will be allowed to decompose naturally.
		 Areas of non-merchantable vegetation that must be cleared will be piled and be piling and burning is prescribed, trees will be sheared at the stump using bulld blades.
		 Hydro One will plant seedlings along new off-ROW access roads in conservat parks (limited to roads that require new clearing and new construction). Where used, these areas will be reclaimed to their pre-existing condition to the exten- One will plant seedlings in the one temporary helicopter pad within the Campu following construction.
		 New, on-ROW trails will be reclaimed, and topsoil will be rolled back over the subject to erosion, and waterbody crossing locations that have been removed seeded in accordance with MNRF, or other applicable regulatory agency, requ species establishment during reclamation, as soon as feasible after construction
		 The reclaimed on-ROW access road will naturally vegetate along with the rem will be managed to support vegetation that is compatible with the safe operation

	Net Effect
Area will avoid disturbance of area is not permitted.	
OW with heavy equipment is existing roads or trails that xisting transmission line or	
ed by implementing the ections of this EA will be	
th formal and informal ders, and other organizations. ement appropriate restriction or reduce effects to	
ction, operation and fected parks and protected	
ne Project. Trees of the ROW according to clearing	
set out directions that involve	
on that will impede Hydro One's y Hydro One Forestry Services. FAC-003 and the minimum	
on-site in accordance with the Act.	
l to ensure depths do not expected to be required, but if long property lines, and along ing the low vegetation pile. The	
burned or mulched. Where dozers equipped with shear	
tion reserves and provincial e existing roads and trails are t practicable. In addition, Hydro us Lake Conservation Reserve	
reclaimed road. Areas that are l after construction will all be uirements to promote plant ion.	
nainder of the right-of-way and on of the transmission line.	



Project Component or Activity	Potential Effect	Mitigation Measures	Net Effect
		 To reduce impacts on canoe routes and portages, vegetation clearing around important canoe routes and associated portages will be limited to where necessary for safety. Compatible vegetation will be retained where practical to meet regulatory requirements and minimize visual disturbance from activities, maintain visibility of portage on either side of the ROW and access roads for recreational user accessibility, keep portages cleared of vegetation debris, and maintain the existing grade of the portage in a manner that is safe for recreational users. 	
Provincial Parks, Conservation Reserves, ANSIs, Enhanced Management Areas	 Changes to the management objectives of parks and protected 	 Hydro One will work with regulatory agencies and consult with Indigenous communities to update the relevant provincial park management plans and conservation reserve management statements to allow for the Project, where required. 	 Net changes to the management
 Project activities during the construction stage: Surveying and staking; 	areas.	 In the event that the municipal and provincial Crown land use planning and management documents do not provide explicit guidance or permission for transmission line development through the Swamp River ANSI, the Project will implement a permit consultation process through the Permits and Approvals Plan. This are provide to the provincial for the provide the providet the provide the provi	objectives of parks and protected areas.
• Clearing, grubbing and grading the ROW;		agencies, private landowners, and Indigenous communities throughout the duration of the permitting	
 Construction of access roads, watercourse crossings, laydown areas, and construction camps; 		process, ROW clearing, and construction activities. The permits and approvals plan acknowledges that working proactively with municipalities and communities is integral, with consultation and engagement following Hydro One's protocols.	
 Equipment and material delivery; 		 Hydro One will plant seedlings along new off-ROW access roads in conservation reserves and provincial parks (limited to roads that require new clearing and new construction). Where existing roads and trails are 	
 Tower structure foundation installation; 		used, these areas will be reclaimed to their pre-existing condition to the extent practicable. In addition, Hydro	
 Tower structure assembly and erection; 		One will plant seedlings in the one temporary helicopter pad within the Campus Lake Conservation Reserve following construction	
 Conductor stringing and installation; 		 New on-ROW trails will be reclaimed, and topsoil will be rolled back over the reclaimed road. Areas that are 	
 Clean-up and restoration; and 		subject to erosion, and waterbody crossing locations that have been removed after construction will all be	
 Testing and commissioning. 		seeded in accordance with MNRF, or other applicable regulatory agency, requirements to promote plant species establishment during reclamation, as soon as feasible after construction.	
Project activities during the operation and maintenance stage:		 The reclaimed on-ROW access road will naturally vegetate along with the remainder of the right-of-way and will be managed to support vegetation that is compatible with the safe operation of the transmission line. 	
• Structure climbing and helicopter inspections;		 To reduce impacts on canoe routes and portages, vegetation clearing around important canoe routes and 	
 Line hardware and insulator thermography; 		where practical to meet regulatory requirements and minimize visual disturbance from activities, maintain	
 ROW inspections; 		visibility of portage on either side of the ROW and access roads for recreational user accessibility, keep	
 Visual ground patrol; 		portages cleared of vegetation debris, and maintain the existing grade of the portage in a manner that is safe for recreational users.	
 Vegetation management; 			
 On-going repairs and maintenance activities; 			
 Removal of towers, transmission line cables, insulators, and other hardware; and 			
Ground reclamation.			





Project Component or Activity	Potential Effect	Mitigation Measures
Land Use Planning	 Changes to land use 	Construction Stage:
 Project activities during the construction stage: Surveying and staking; Clearing, grubbing and grading the ROW; Construction of access roads, watercourse 	policy and planning.	 Prior to Project construction, appropriate permits, licences, and other approval to satisfy the conditions of provincial, and municipal land use planning and par (i.e., the <i>Planning Act</i>, PPS 2020, CLUPA, the Growth Plan for Northern Ontar <i>Board Act</i>, local roads boards, and rural planning boards). Consultation materi holders to identify and address any concerns or issues. Hydro One will engage with the appropriate land-use planning authority for and permits for all areas, municipalities and unincorporated/unorganized To and permits for all areas.
 Constituction of access roads, watercoulse crossings, laydown areas, and construction camps; Equipment and material delivery; Tower structure foundation installation; Tower structure assembly and erection; Conductor stringing and installation; Clean-up and restoration; Transformer station modifications; and Testing and commissioning. 		 For designated Lake Trout Lakes overlapping the Project footprint, consider the Designated for Lake Trout Management (2006) and the Amendment to Area si #2007-025 (2009) (Update to Area-specific Land Use Policy to Reflect Update Policy for Designated Lake Trout Lakes). Consider the recommended Area of Concern and apply a 120 m buffer as a timber harvesting will take place within this buffer except for access road ro transmission line. Revegetation will be completed post-construction and will areas. Further mitigation for potential impacts to lake trout is presented in S Implement a permit consultation process through the Permits and Approvals P approvals plan acknowledges that working proactively with municipalities and consultation and engagement following Hydro One's protocols. Hydro One will engage with the appropriate land-use planning authority for land the following Hydro Internation and the provide the transmission internation of the provide the transmission internation of the provide the planning authority for land the provide the planning authority for land the planning authority for land
 Project activities during the operation and maintenance stage: Structure climbing and helicopter inspections; Line hardware and insulator thermography; ROW inspections; Visual ground patrol; Vegetation management; On-going repairs and maintenance activities; Removal of towers, transmission line cables, insulators, and other hardware; Transformer station modifications; and Ground reclamation. 		 permits for all areas, municipalities and unincorporated/unorganized townships Where possible, access restrictions will be limited, intermittent, and temporary over a planned period of time (i.e., weeks to months) while active construction segment of the Project, before construction moves to another segment along t is restored. Potentially affected property owners will be engaged about the possible placer concerns regarding trespassing and access, as required. Construction and maintenance crews will be present and visible. Noise and air noise, and effluent) are addressed in their appropriate section as part of the ef Project (see Section 6.0). Waste will be appropriately stored, transported, and disposed of according to a federal laws and regulations. Multiple contingency and management plans will be developed for the Project Protection Plan. For example, a Vehicle and Equipment Operation, Maintenan Additionally, a Permits and Approval Plan provides an overview of the general approval process, including any renewal processes and permit consultation. A Plan developed for the Project will set out the permits needed the ROW clearing the provides an overview of the general approval process including any renewal processes and permit consultation. A Plan developed for the Project will set out the permits needed the ROW clearing approval process.
		 management practices. Operation and Maintenance Stage Access roads will be established within the transmission line ROW for use duri maintenance. The access will be located, for the most part, within the cleared places (e.g., where the ROW spans a waterbody or crosses difficult terrain) an required to reduce the number of watercourse crossing requirements. Multiple contingency and management plans will be developed for the Project. Equipment Operation, Maintenance, and Refueling Plan. Additionally, a Permir an overview of the general project permits and the approval process, including permit consultation.



	Net Effect
als will also be acquired in order arks management documents ario, the <i>Northern Services</i> rial can be provided to interest	 Net changes to land use policy and planning.
r land-use related permissions ownships.	
he Inland Ontario Lakes specific Crown Land Use Policy ed Crown Land Disposition	
described, as practicable. No outes and as practicable for the ill include seeding disturbed Section 6.6.	
Plan. The permits and I communities is integral, with	
nd-use related permissions and os.	
y. Access restrictions will occur n is ongoing in that particular the linear corridor and access	
ement of fencing to address	
ir emissions (e.g., air, dust, effects assessment of the	
applicable provincial and	
t as part of the Environmental nce, and Refuelling Plan. Il project permits and the A Clearing and Timber Salvage ring process, and timber	
ring operation and ROW; however, in some in access road off ROW may be	
t. For example, a Vehicle and hits and Approval Plan provides g any renewal processes and	



Project Component or Activity	Potential Effect	Mitigation Measures
		City of Dryden: Additional mitigation measures related to conformance with plar
		 Hydro Ope will engage with the City of Dryden to determine if additional technologies.
		the Project crossing waste disposal industrial lands via an existing access roa required.
		 Utility infrastructure which overlaps extractive industrial lands should not adve extractive industry in the future;
		 Site alteration which overlaps open space lands should complement the natur protection of the City of Dryden's trail systems.
		 Site alteration which overlaps rural lands should preserve the character and s landscape.
		City of Thunder Bay : Additional mitigation measures related to conformance with of Thunder Bay include the following:
		 Engage with the City of Thunder to determine if the one existing access road v crosses a small area of environmental protection zone lands.
		The Municipality of Shuniah: Additional mitigation measures related to conform the Municipality of Shuniah include the following:
		 Site alteration within rural lands should ensure that the rural character of the e agricultural and/or natural resource operations are protected.
		Rural or Unincorporated Areas:
		 Hydro One will engage with the appropriate planning authority for land-use rel for all areas, municipalities and unincorporated/unorganized townships. This of the applicable rural planning boards that encompass both small municipalities
Land Use Planning	Changes to current land	Construction Stage:
	use.	Hydro One is committed to not displacing residences where the residents do r
Project activities during the construction		Hydro One will implement a Land Acquisition Compensation Program for direct
 Surveying and staking; 		 Hydro One will contact directly affected property owners to meet to review the Acquisition Compensation Principles that will set out the process between Hydro to conclude property settlements.
 Clearing, grubbing and grading the ROW; 		 Hydro Ope's project-specific L and Acquisition Compensation Principles will in
 Construction of access roads, watercourse crossings, laydown areas, and construction camps; 		to account for time invested in the lands right process and compensation to al assessments, surveys, studies, and land appraisals.
 Equipment and material delivery; 		Hydro One will review any ancillary damages during the construction stage and the second damages during the construction stage and the second damages during the second damages damag
 Tower structure foundation installation; 		through the Land Acquisition Compensation Program if a loss can be demons
 Tower structure assembly and erection; 		 Construction personnel will ensure that activities and equipment do not impact properties, structures or operations. In the unlikely event that physical damage
 Conductor stringing and installation; 		landowner, damages are subject to compensation through Hydro One's existing
 Clean-up and restoration; and 		Hydro One will engage with the appropriate land-use planning authority for lar
 Testing and commissioning. 		consultation with the applicable rural planning boards that encompass both sr
Project activities during the operation and maintenance stage:		 Hydro One, throughout the construction phase of the Project, will continue to e regulators agencies private landowners and Indigenous communities
 Structure climbing and helicopter inspections; 		

nning policies for the City of	Net Effect
nical studies area required for	
ad where no improvements are	
ersely affect the viability of the	
al area and ensure the	
cenic quality of the rural	
th planning policies for the City	
with potential improvements	
nance with planning policies for	
environment and existing	
lated permissions and permits can include consultation with and unincorporated areas.	
	 Net changes
not want to leave their home.	to current
ctly affected property owners.	
e project-specific Land dro One and property owners	
clude financial compensation llow access for environmental	
nd can compensate loss strated.	
t upon neighbouring es are incurred by a ng compensation policies.	
nd-use related permissions and ps. This can include nall municipalities and	
engage with interest holders,	



Project Component or Activity	Potential Effect	Mitigation Measures
 Line hardware and insulator thermography; 		Operation and Maintenance Stage
ROW inspections;		 Ongoing operation or maintenance damages for private land will be pursuant Compensation Program and its associated policies.
 Visual ground patrol, Vegetation management; 		 Construction personnel will ensure that activities and equipment do not impar properties, structures or operations. In the unlikely event that physical damage
On-going repairs and maintenance activities;		landowner, damages are subject to compensation through Hydro One's exist
Removal of towers, transmission line cables, insulators, and other hardware; and		
Ground reclamation.		
[:] orestry Resource Uses	• Changes to the area and	Construction Stage:
 Project activities during the construction stage: Surveying and staking; Clearing, grubbing and grading the ROW; 	access of forestry resources.	 Affected landowners, lessees and licence holders will be notified before the beprevent or reduce effects to their operations or activities, and construction activities holders through ongoing engagement where possible. Where applicate notified with respect to crossing agreements and third-party agreements (the third-party agreements will be determined prior to construction). During the construction and operation phases, inconsistencies between concept.
Construction of access roads, watercourse crossings, laydown areas, and construction camps;		permits, approvals, certificates, plans and by-laws will be resolved prior to co with relevant municipal, provincial, and federal bodies. Interest holders, fores holders, licence holders, and other tenure holders will continue to be engaged recommendations or concerns will be incorporated.
Equipment and material delivery;		 As part of the process to obtain an Overlapping Licence Agreement with each
Tower structure roundation installation,		their contractor will meet with each SFL holder to discuss:
Conductor stringing and installation:		Harvest and utilization plans for merchantable and non-merchantable tree
Clean up and restoration: and		 Disposal plans for non-marketable trees and non-merchantable portions of Available markets, product specifications and pricing for harvested timber;
Testing and commissioning.		 Wood supply commitments in accordance with SFL conditions; Use and maintenance of forest access roads:
roject activities during the operation and naintenance stage:		 Potential synergies, or conflicts, in timing of operations with the SFL holde maintenance, timber harvest, wood haul);
Structure climbing and helicopter inspections;		 Disruption of recently renewed/established post-harvest areas; and Rehabilitation and regeneration of disturbed sites.
 Line hardware and insulator thermography; ROW inspections; 		 Hydro One and/or their contractor will also meet with non-SFL related wood f for harvested open market wood fibre, product specifications and pricing.
 Visual ground patrol; Vegetation management; On-going repairs and maintenance activities; 		 The Project will use existing road and trail infrastructure where practicable, in resulting from the construction of new access roads and trails, although new alleviate some additional pressure on the roads. Temporary road disturbance continuous, as construction will be completed using a staged approach.
 Removal of towers, transmission line cables, insulators, and other hardware; and 		 Hydro One will develop a Clearing and Timber Salvage Plan that will be finali SFL holder who will advise on the forest products that can be received by the
Ground reclamation.		 Coordinate construction activities with forestry resource land users through o continue to engage licence holders, and other tenure holders, and where app Agreements and guidelines).
		 Review planned harvest allocations from approved FMPs as they relate to Pr including clearing of the ROW and use of land for temporary Project compon camps and laydown yards.
	I	

	Net Effect
to the Landowner et upon neighbouring es are incurred by a ng compensation policies.	
eginning of construction to ivities will be coordinated with le, affected parties will be list of crossing agreements and itions of different licences,	 Net changes to the area and access of forestry resources.
nstruction, through engagement ry resource land users, license I and, where appropriate,	
n SFL-holder, Hydro One and/or	
s; f trees;	
r (e.g., road use and	
acilities to discuss opportunities	
order to limit disturbances access roads constructed may s and restrictions will not be	
zed in consultation with the mills.	
ngoing engagement, and will ropriate (i.e., Road Use	
oject construction activities ents such as construction	



Project Component or Activity	Potential Effect	Mitigation Measures
		Operation and Maintenance Stage:
		 Coordinate construction activities with forestry resource land users through or continue to engage licence holders, and other tenure holders, and where app Agreements).
		 Vegetation management in previously forested areas within will occur during t phase in the permanent ROW in order to maintain transmission line integrity.
Mining Resource Uses	 Changes to the area and 	Construction Stage:
 Project activities during the construction stage: Surveying and staking; Clearing, grubbing and grading the ROW; Construction of access roads, watercourse 	access of mining resources.	 During the construction and operation phases, inconsistencies between condipermits, approvals, certificates, plans and by laws will be resolved prior to conwith relevant municipal, provincial, and federal bodies. Consultation material wholders to identify and address any concerns or issues. The Project will coord with mining resource land users through ongoing engagement, and will continuic licence holders, and other tenure holders, and where appropriate recommend reviewed and incorporated as possible.
crossings, laydown areas, and construction camps;		 The Project will use existing road and trail infrastructure where practicable, in resulting from the construction of new access roads and trails, although new a alleviate some additional pressure on the roads.
 Equipment and material derivery; Tower structure foundation installation; Tower structure foundation installation; 		 Coordinate construction activities with mining resource land users through on continue to engage claim holders, licence holders, and other tenure holders, a
 Tower structure assembly and erection; Conductor stringing and installation; Clean-up and restoration; and Testing and commissioning. 		
Project activities during the operation and		Operation and Maintenance Stage:
 Structure climbing and helicopter inspections; Line hardware and insulator thermography; ROW inspections; Visual ground patrol; Vegetation management; On-going repairs and maintenance activities; Removal of towers, transmission line cables, insulators, and other hardware; and Cround realemetion 		 Coordinate operation and maintenance activities with mining resource land us engagement, and continue to engage claim holders, licence holders, and othe appropriate.



	Net Effect
ngoing engagement, and will ropriate (i.e., Road Use the operation and maintenance	
itions of different licences, netruction, through engagement will be provided to interest linate construction activities ue to engage claim holders, lations or concerns will be order to limit disturbances access roads constructed may going engagement, and will and where appropriate. hotified before the beginning of construction activities will be list of crossing agreements and	• Net changes to the area and access of mining resources.



Project Component or Activity	Potential Effect	Mitigation Measures
Aggregate Resources	• Changes to the area and	Construction Stage:
 Project activities during the construction stage: Surveying and staking; Clearing, grubbing and grading the ROW; Construction of access roads, watercourse 	access of aggregate resources.	 During the construction and operation phases, inconsistencies between condit permits, approvals, certificates, plans and by laws will be resolved prior to con relevant municipal, provincial, and federal bodies. Consultation material can be to identify and address any concerns or issues. The Project will coordinate cor aggregate resource land users through ongoing engagement, and will continue licence holders, and other tenure holders, and where appropriate recommendar reviewed and incorporated as possible.
crossings, laydown areas, and construction camps;		 Coordinate construction activities with mining resource land users through ong continue to engage claim holders, licence holders, and other tenure holders, and
 Equipment and material delivery; 		• Affected landowners, lessees and licence holders and claims holders will be n
 Tower structure foundation installation; 		construction to prevent or reduce effects to their operations or activities, and c
 Tower structure assembly and erection; 		notified with respect to crossing agreements and third-party agreements (the li
 Conductor stringing and installation; 		third-party agreements will be determined prior to construction).
 Clean-up and restoration; and 		• Applications for pits or quarries will be developed in accordance with the Aggre
 Testing and commissioning. 		part of the pit or quarry site plan.
Project activities during the operation and		 New aggregate pits will be excavated primarily using equipment common to age excavated topsoil or overburden will be stored on-site and used for eventual re-
 Structure climbing and helicopter inspections; 		 Existing access roads and Project roads, including within the 46 m ROW, will I to the source of use.
 Line hardware and insulator thermography; ROW inspections: 		 Appropriate sediment and erosion controls will be implemented at each pit and appropriate.
 Visual ground patrol; 		 Pits no longer in use will be reclaimed and a reclamation plan will be prepared to the MNRF. Reclamation success of the pit sites will be monitored by Hydro.
 Vegetation management; On-going repairs and maintenance activities; 		 Affected landowners, lessees and licence holders and claims holders are to be construction to prevent or reduce effects to their operations or activities, and c
 Removal of towers, transmission line cables, insulators, and other hardware; and 		coordinated with tenure holders through ongoing engagement. Where applical notified with respect to crossing agreements and third-party agreements (the little party agreements will be determined prior to construction).
• Ground reclamation.		 Where applicable, affected parties will be notified with respect to crossing agreements (the list of crossing agreements and third-party agreements will be construction).
		• The Project will adhere to contingency and management plans developed for t Access Plan will gather additional information regarding existing and potential detail restrictions on site access.
		Operation and Maintenance Stage:
		 Coordinate construction activities with mining resource land users through ong continue to engage claim holders, licence holders, and other tenure holders, and
		 Affected landowners, lessees and licence holders and claims holders will be n construction to prevent or reduce effects to their operations or activities, and c coordinated with tenure holders through ongoing engagement. Where applical notified with respect to crossing agreements and third-party agreements (the li- third-party agreements will be determined prior to construction).



	Net Effect
itions of different licences, nstruction, engagement with be provided to interest holders onstruction activities with be to engage claim holders, lations or concerns will be	 Net changes to the area and access of aggregate resources.
going engagement, and will and where appropriate. notified before the start of	
ble, affected parties will be lble, affected parties will be list of crossing agreements and	
regate Resources Application red at the time of application as	
ggregate operations and eclamation of the pits.	
be used to transport aggregate	
d associated storage area as	
d by Hydro One and submitted One.	
e notified before the start of construction activities will be ble, affected parties will be list of crossing agreements and	
eements and third-party e determined prior to	
this Project, such as an I aggregate pit locations and	
going engagement, and will and where appropriate. notified before the start of	
ble, affected parties will be list of crossing agreements and	



Project Component or Activity	Potential Effect	Mitigation Measures
Hunting, Trapping, and Fishing		Construction Stage:
Project activities during the construction stage:		 Landowners, guided outfitters, administrators, registered trappers, the Ontario Hunters (OFAH), registered licence holders, within the Project Footprint be no before the start of construction.
 Surveying and staking; 		 Indigenous communities, guided outfitters and registered trappers, and BMA a engaged with and where appropriate recommendations or concerns will be appropriate recommendations.
Clearing, grubbing and grading the ROW;Construction of access roads, watercourse		 A Communications Plan will establish the communications process for both for communications with Indigenous communities, project stakeholders, rightshell
crossings, laydown areas, and construction camps;		A minimum 48-hour notification in advance of major activities commencing will Communities, directly affected landowners, or as otherwise required by permi
 Equipment and material delivery; 		construction activities/schedule will be made available via the Hydro One proj
 Tower structure foundation installation; Tower structure constallation installation; 		 Project construction activities will be confined to surveyed and marked areas, Traffic/Access Management Plan will be prepared and implemented
• Tower structure assembly and erection;		 Removal of rinarian vegetation will be limited to the extent necessary, and to the
 Conductor stringing and installation; Clean up and restoration; and 		road or trail width only. Removal of compatible vegetation at waterbody crossi
 Clean-up and restoration; and Testing and commissioning 		alignment ROW will generally be limited to a 10m-wide ROW for equipment as structures (e.g., temporary bridges). Additional removal of incompatible veget
 resung and commissioning. 		technical or safety reasons as appropriate.
Project activities during the operation and		Vegetation removal along the ROW will take into consideration:
maintenance stage:		 widths of waterbodies; location of wetlands; locations of known archaeolog
• Structure climbing and helicopter inspections;		 areas of commercial timber and the method of cutting and storing commercial riparian buffer zones (e.g., for waterbodies and other sensitive natural features)
Line hardware and insulator thermography;	 Changes to area and 	Construction routes will be designed to avoid key access roads/entrances, an
ROW inspections;	access to hunting,	maintenance will be gated, fenced, ditched or bermed to limit travel to constru
 Visual ground patrol; Vegetation management: 	associated activities.	outside of the ROW will be reviewed by MNRF as tenure will be required for s
 On-going repairs and maintenance activities: 		placement of gates and/or access restrictions will be in accordance with MINR
 Removal of towers, transmission line cables, insulators, and other hardware; and Ground reclamation 		 For designated Lake Trout Lakes overlapping the Project rootprint, considerate Designated for Lake Trout Management (2006) and the Amendment to Area s #2007-025 (2009) (Update to Area-specific Land Use Policy to Reflect Update Policy for Designated Lake Trout Lakes).
		 Consideration of the recommended Area of Concern and application of a 120 timber harvesting will take place within this buffer except for access routes an transmission line. Further mitigation for potential impacts to lake trout is prese Fish Habitat) of the EA.
		 Disturbances will be avoided and minimized and access restrictions on traplin implemented where possible.
		 If temporary road closures are required during material transportation or other Project will coordinate with the appropriate road authority to ensure that proper required signage and traffic controls are implemented, such as through a Traffic completed in accordance with the Ontario Traffic Manual Book 7 (where applied)
		 MNRF and/or trail and canoe route operators will continue to be consulted to o to facilitate continued, use, and access to hunting, trapping, and fishing areas
		 Several other management plans will also be developed and implemented for Access Plan will identify new and existing roads, entrance approaches, water workspaces. Hydro One will continue to consult with trappers associations and Resources and Forestry to confirm how the Project may effect trappers. Regis consulted and appropriate mitigation applied. This could include providing con construction of the Project (e.g., due to damage to trapper assets, general dis



	Not Effort
o Federation of Anglers and otified of Project activities	 Net changes to area and access to hunting,
and BHA licence holders will be ddressed.	trapping, fishing and associated
ormal and informal lders, and other organizations. Il be provided to Indigenous its/approvals. Details of ject website.	activities.
and a construction	
the requirement of the access ings along the transmission line iccess to waterbody crossing tation may be required for	
gical and cultural heritage sites; cial timber, and required ures).	
nd new travel lanes for action traffic and to prevent nee stage. Gates or fencing structures on Crown land, and RF land use policies.	
tion of the Inland Ontario Lakes specific Crown Land Use Policy ed Crown Land Disposition	
m buffer, as practicable. No ad as practicable for the ented in Section 6.6 (Fish and	
e license areas will be	
r construction activities, the er notice is provided and that ffic Management Plan that is icable).	
develop appropriate strategies	
, the Project. For example, an crossings, and temporary d the Ministry of Natural stered active trappers will be mpensation if impacted by the sturbance, adverse effects, and	



Project Component or Activity	Potential Effect	Mitigation Measures	Net Effect
		 impacts to trapping operations). Hydro One and/or their contractor will maintain ongoing communication with local trapping groups, associations and trappers, and where feasible, allow for trappers the opportunity to relocate traplines in advance of construction. Operation and Maintenance Stage: 	
		 During the operations stage, existing roads and trails will be used where possible with affected trails repaired and rehabilitated. 	
		 Maintain signage during operation should access and navigation be impeded during the operation and maintenance stage. 	
		 MNRF and/or trail and canoe route operators will continue to be consulted to facilitate continued, uninterrupted use, and access to hunting, trapping, and fishing areas. 	
Recreation and Commercial Tourism	 Changes to the quantity 	Construction Stage	 Net changes
Project activities during the construction stage:	and quality of lands available for recreational and commercial tourism	 The Project is designed to maximize alignment with existing infrastructure corridors to reduce disturbances land and resource users in the Project footprint who may participate in camping, commercial tourism, or other recreational activities. 	to the quality and quantity of lands
Surveying and staking;	activities.	 Disturbance to the natural landscape will be avoided where practicable in areas where camping, commercial tourism, recreational activities and/or recreational infrastructure is present. 	recreation
 Clearing, grubbing and grading the ROW; Construction of access roads, watercourse crossings, laydown areas, and construction camps; 		 Multiple contingency and management plans will be developed for the Project. For example, a construction Traffic/Access Management Plan will be prepared and implemented. The Access Plan will identify new and existing roads, entrance approaches, water crossings, and temporary workspaces. Additionally, a Communications Plan will be developed to outline the communications procedures with Indigenous 	commercial tourism activities.
 Equipment and material delivery; Town structure foundation installation. 		communities, project stakeholders, rightsholders, and other organizations. Project construction activities will be confined to surveyed and marked areas	
• Tower structure foundation installation;		 If excessive rain, wet weather, or flood-like conditions occur or are anticipated, the following contingency. 	
 Tower structure assembly and erection; Conductor stringing and installation; 		measures will be implemented as appropriate: re-schedule work or reduce/detour traffic in areas where soils	
Conductor stillinging and installation, Clean up and restaration;		are prone to rutting; restrict construction traffic, where feasible, to equipment with low-ground pressure tires or wide pad tracks: during extreme wet conditions, work only in low-risk areas, such as well-drained soil or	
 Clean-up and restoration, Transformer station modifications: and 		well-sodded lands, until conditions improve; limit vehicle access through soft/wet areas to periods when	
 Testing and commissioning. 		frozen conditions occur (i.e., early morning or evening); crews are to park in a stable area and walk to on- site equipment if feasible; install access or swamp matting in sensitive areas to protect soils; if required, silt fencing or other methods of erosion control will be installed.	
Project activities during the operation and maintenance stage:		 To minimize indirect nuisance effects, local municipal noise by laws and the MECP Model Municipal Noise Control Bylaw (i.e., NPC-115) will be complied with including making sure equipment used is well maintained 	
• Structure climbing and helicopter inspections;		and operated so as not to exceed the Health Canada Noise Guidance and MECP NPC-300 noise guideline	
• Line hardware and insulator thermography;		including turning off vehicles and equipment; and minimizing reversing where possible, reasonable, and	
 ROW inspections; 		practicable. Noise concerns will also be further addressed as they arise through a complaint resolution	
 Visual ground patrol; 		 Construction activities will typically occur during one 10-hour shift per day, generally within the daytime 	
 Vegetation management; 		period (i.e., 07:00 to 18:00). In the event construction will occur beyond the daytime period, Hydro One, with	
 On-going repairs and maintenance activities; 		its contractors will review mitigation measure requirements.	
 Removal of towers, transmission line cables, insulators, and other hardware; 		 Noise concerns will be addressed as they arise through a complaint resolution mechanism whereby individuals can contact Hydro One if issues arise. 	
 Transformer station modifications; and Ground reclamation. 		 Construction routes will be designed to avoid key access roads/entrances to parks and protected areas, tourism establishment areas, campsites, boat launches and caches, aquatic access points, and trailheads as reasonably possible. New travel lanes for maintenance will be gated, fenced, ditched or bermed to limit travel to construction traffic and to prevent unplanned/undesired recreational access during the operation and maintenance stage. Gates or fencing outside of the ROW will be reviewed by MNRF as tenure will be required for structures on Crown land, and placement of gates and/or access restrictions will be in accordance with MNRF land use policies. 	





Project Component or Activity	Potential Effect	Mitigation Measures
		 If temporary road closures are required during material transportation or other Project will coordinate with the appropriate road authority to ensure that prope required signage and traffic controls are implemented, such as through a Traffi completed in accordance with the Ontario Traffic Manual Book 7 (where applic submission to local road authorities upon request.
		 Guided outfitters and trapline license area, BMA and BHA licence holders will appropriate, mutually beneficial agreements will be developed with the affected will be avoided and minimized and access restrictions on camping, commercia activities, features or infrastructure is present will be implemented where possi-
		 During the construction stage, landowners, guided outfitters, tourism establish and protected area administrators, registered trappers, the Ontario Federation registered BMA and BHA licence holders, local trail associations, boating clubs notified of Project activities before the start of construction.
		 The Project will work with administrators and the appropriate stakeholders dur operations and maintenance stages to implement appropriate restriction protoc and commercial tourism areas. Work will be completed to promote user acces and commercial tourism land area user safety.
		 Project construction activities will be confined to surveyed and marked areas, a Traffic/Access Management Plan will be prepared and implemented.
		 Signs will be placed in engagement with the appropriate authorities. The MNR to facilitate continued, uninterrupted use and access to parks and protected ar be considered to be a key trail resource for access to other areas, an alternate to navigate around temporary closures should be developed.
		 The ROW will be utilized for equipment access to waterbody crossing structure Instream activity will be completed in the shortest timeframe practicable to min severity of disturbance to waterbodies.
		 Access roads will use in-situ and/or other locally sourced material (e.g., gravel create a stable surface for travel (e.g., cleared wood, logs and swamp mats matravel across wetlands, bogs and/or low-lying areas). All access roads will be average 10 m wide driving surface and an average 20 m vegetation clearing a for safe movement of equipment. Removal of compatible vegetation at waterbut transmission line alignment ROW will generally be limited to a 10 m-wide ROV waterbody crossing structures (e.g., temporary bridges). Additional removal of be required for technical or safety reasons as appropriate
		 Hydro One will plant seedlings along new off-ROW access roads in conservati parks (limited to roads that require new clearing and new construction). Where used, these areas will be reclaimed to their pre-existing condition to the extent One will plant seedlings in the one temporary helicopter pad within the Campu following construction.
		 New, on-ROW trails will be reclaimed, and topsoil will be rolled back over the r subject to erosion, and waterbody crossing locations that have been removed seeded in accordance with MNRF, or other applicable regulatory agency, require species establishment during reclamation, as soon as feasible after construction
		 The reclaimed on-ROW access road will naturally vegetate along with the rem will be managed to support vegetation that is compatible with the safe operation
		 Vegetation clearing should be kept to a minimum around canoe routes and the will be limited to where necessary for safety and compatible vegetation will be meet regulatory requirements and minimize visual evidence of disturbance from

	Net Effect
r construction activities, the er notice is provided and that ffic Management Plan that is cable) and can also include	
be engaged with, and, where ed tenure holders. Disturbances al tourism, or other recreational sible.	
nment area operators, parks n of Anglers and Hunters, os and snowmobile clubs will be	
ring both construction, ocols within affected recreation ss while maintaining recreation	
and a construction	
RF will continue to be consulted reas. Should any affected trails e trail route to allow land users	
res (e.g., temporary bridges). nimize the duration and	
el pits) where practicable to hay be used as a base for built or upgraded to have an area but could be wider to allow body crossings along the W for equipment access to f incompatible vegetation may	
tion reserves and provincial e existing roads and trails are It practicable. In addition, Hydro us Lake Conservation Reserve	
reclaimed road. Areas that are I after construction will all be uirements to promote plant ion.	
nainder of the right-of-way and on of the transmission line.	
eir associated portages and e retained where practicable to om activities.	



Project Component or Activity	Potential Effect	Mitigation Measures	Net Effect
		Operation and Maintenance Stage	
		 A Communications Plan will be developed to outline the communications procedures with Indigenous communities, project stakeholders, rightsholders, and other organizations. Project construction activities will be confined to surveyed and marked areas. 	
		 To minimize indirect nuisance effects, local municipal noise by laws and the MECP Model Municipal Noise Control Bylaw (i.e., NPC-115) will be complied with including making sure equipment used is well maintained and operated so as not to exceed the Health Canada Noise Guidance and MECP NPC-300 noise guideline on ambient noise levels. Vehicles and equipment will be operated such that impulsive noise are minimized including turning off vehicles and equipment; and minimizing reversing where possible, reasonable, and practicable. Noise concerns will also be further addressed as they arise through a complaint resolution mechanism where Hydro One can be contacted if there are perceived noise issues. 	
		 The Project will work with administrators and the appropriate stakeholders during operations and maintenance to implement appropriate restriction protocols within affected recreation and commercial tourism areas. Work will be completed to promote user access while maintaining recreation and commercial tourism land area user safety. 	
		 During the operations stage, existing roads and trails will be used where possible with affected trails repaired and rehabilitated. 	
		 During the operation and maintenance phases, restrictions to accessing recreation and commercial tourism features will be limited to infrequent, periodic maintenance activities; otherwise, it is anticipated that the recreation and commercial tourism features within the Project footprint will remain open and accessible to users. 	
		 Disturbances will be avoided and minimized and access restrictions on areas where OTN trails, non-OTN trails, and other trails including resource trails are located will be implemented where possible. 	
		 The Project will work with administrators and the appropriate stakeholders during operation and maintenance to implement appropriate restriction protocols within affected recreation and commercial tourism areas. Work will be completed to promote user access while maintaining recreation and commercial tourism land area user safety. 	



Project Component or Activity	Potential Effect	Mitigation Measures
Navigation	Changes to the area and	Construction Stage
Project activities during the construction	access of navigable watercourses,	• Obtain applicable approvals and meet the requirements of the <i>Canadian Navi</i> conditions of approvals prior to construction, which may include notifications.
stage:Surveying and staking;Clearing, grubbing and grading the ROW;	watercourse crossings, and navigation.	 Obtain regulatory approvals as required from applicable regulatory agencies (LRCA) prior to installation of water body crossing structures. Hydro One will c regulatory agency to discuss any alternatives or modifications to the crossing approvals before construction begins.
 Construction of access roads, watercourse crossings, laydown areas, and construction camps: 		 Construct water body crossing structures according to the crossing method id crossing lists and in accordance with regulatory approvals.
 Equipment and material delivery; Tower structure foundation installation; Tower structure assembly and erection: 		 Indigenous communities, landowners, guided outfitters, administrators, register Federation of Anglers and Hunters (OFAH), registered licence holders, within notified of Project activities before the start of construction, as the Project will Plan.
 Conductor stringing and installation; Clean-up and restoration; and 		 Equipment or waterbody crossing structures that may temporarily impede or to recreational users during the construction phase will be appropriately marked warning signals.
 Testing and commissioning. 		 Remove temporary water body crossing structures and associated fill materia longer required after construction, unless otherwise agreed upon in third-party
 Project activities during the operation and maintenance stage: Structure climbing and belicopter inspections: 		 Maintain visibility of portage on both side of the row (e.g., no stockpiled veget access points) and access roads for recreational user accessibility and keep debris and maintain the existing grade of the portage in a manner that it is safety
 Line hardware and insulator thermography; ROW inspections; 		 No disturbance of portages outside of the Project footprint will be permitted ar completed in the shortest timeframe practicable.
 Visual ground patrol; 		Operations and Maintenance Stage
Vegetation management;On-going repairs and maintenance activities;		 The Project will maintain signage during operation should access and navigat operation and maintenance stage.
 Removal of towers, transmission line cables, insulators, and other hardware; and Cround replamation 		 Maintain visibility of portage on both side of the ROW (e.g., no stockpiled veg access points) and access roads for recreational user accessibility and keep debris and maintain the existing grade of the portage in a manner that it is safe
		 No disturbance of portages outside of the Project footprint will be permitted ar completed in the shortest timeframe practicable.
		• The MNRF and/or trail and canoe route operators will continue to be consulte strategies to facilitate continued, uninterrupted use and access to lands and for

BHA = Bait Harvesting Area; BMA = Bear Management Area; DFO = Fisheries and Oceans Canada; EA = environmental assessment; ESMP = Environmental and Social Management Plan; FMU = Forestry Management Unit; km = kilometre; MNRF = Ministry of Natural Resources and Forestry; MOECC = Ontario Ministry of the Environment and Climate Change; ROW = right-of-way; m = metre.



	Net Effect
igable Waters Act and	 Net change to the area and access of
(i.e., MNRF, DFO, and/or consult with the appropriate requirements specified in	navigable watercourses, watercourse crossings, and
entified on the water body	navigation.
ered trappers, the Ontario the Project footprint will be implement a Communications	
be a hazard to navigation for with warning signage or other	
ls when the crossing is no y agreements.	
ation or soils at the portage portages cleared of vegetation fe for the recreational users.	
nd instream activity will be	
ion be impeded during the	
etation or soils at the portage portages cleared of vegetation fe for the recreational users.	
nd instream activity will be	
d to develop appropriate eatures utilized for fishing.	



7.1.10 Net Effects Characterization

7.1.10.1 Net Effects Characterization Approach

The effects assessment approach followed the general process described in Section 5.0 (methods section).

Potential effects with no predicted net effect after implementation of mitigation measures identified in Table 7.1-38 are not carried forward to the net effects assessment.

Net effects are described using the significance factors identified in Table 7.1-39. Effects levels are defined for the magnitude of effects characteristics in Table 7.1-40.

Indicator / Net Effect	Negligible	Low	Moderate	High
 All land and resource use indicators 	 The effect may or may not be discernible given the limited anticipated change, and if discernible, is anticipated at the individual level only. No changes to land use are anticipated at the community level. This minimal change falls within the system's capacity to respond. 	• The effect is discernible at the individual and community level but is not expected to materially change people's land use and is not anticipated to be beyond the current system's capacity to respond.	• The effect is discernable at the individual and community level and results in a negative or beneficial change to people's land use, but not one that is beyond the current system's capacity to respond.	• The effect is expected to interfere with or enhance people's land use at the individual and community level and is not within the current system's capacity to respond.

Table 7.1-39: Magnitude Effect Levels for Land and Resource Use Indicators

7.1.10.2 Net Effects Characterization

A summary of the characterization of net effects of the Project on non-Indigenous land and resource use is provided in Table 7.1-44. Net effects are described after the implementation of effective mitigation measures, and summarized according to direction, magnitude, geographic extent, duration/reversibility, frequency, and probability of the effect occurring following the methods described in Section 7.1.10.2 (Net Effects Characterization).





Effective implementation of mitigation measures that have been summarized in Table 7.1-38 are expected to reduce the magnitude and duration of net effects on non-Indigenous land and resource use.










Criteria	Indicator	Net Effect	Direct/Indirect	Direction	Magnitude	Geographic Extent	Duration/ Irreversibility	Frequency	Likelihood of Occurrence	Significance
 Provincial Parks; Conservation Reserves; ANSIs; and Enhanced Management Areas. 	 Change to protected areas 	 Net changes to protected areas. 	Direct and Indirect	Negative	Low to Moderate	Local	Long-term	Continual	Certain	Not Significant
 Provincial Parks; Conservation Reserves; ANSIs; and Enhanced Management Areas. 	 Changes to the management objectives of parks and protected areas. 	 Net changes to the management objectives of parks and protected areas. 	Direct	Negative	Negligible	Local	Long-term	Continual	Probable	Not Significant
 Land Use Planning 	 Change to land use policy and planning. 	 Net changes to land use policy and planning. 	Direct	Negative	Negligible	Local	Long-term	Continual	Certain	Not Significant
 Land Use Planning 	 Changes to current land use. 	 Net changes to current land use. 	Direct	Negative	Moderate	Local	Long-term	Continual	Certain	Not Significant
 Forestry Resource Use 	 Change to the area and access of forestry resources. 	 Net changes to the area and access of forestry resources. 	Direct and Indirect	Negative	Negligible	Local	Short-term and Long-term	Continual	Certain	Not Significant
 Mining Resource Use 	 Change to the area and access of mining resources. 	 Net changes to the area and access of mining resources. 	Direct	Negative	Negligible	Local	Long-term	Continual	Certain	Not Significant
 Aggregate Resources 	 Change to area and access of aggregate resources. 	 Net changes to the area and access of aggregate resources. 	Direct	Negative	Negligible	Local	Long-term	Continual	Certain	Not Significant



Criteria	Indicator	Net Effect	Direct/Indirect	Direction	Magnitude	Geographic Extent	Duration/ Irreversibility	Frequency	Likelihood of Occurrence	Significance
 Hunting, Trapping, and Fishing 	 Changes to area and access of hunting, trapping, and fishing and associated activities 	 Net changes to area and access to hunting, trapping, fishing and associated activities. 	Direct and Indirect	Negative and Positive	Negligible	Local	Long-term	Infrequent	Certain	Not Significant
 Recreation and Commercial Tourism 	 Change to quantity and quality of lands available for recreation and commercial tourism 	 Net changes to the quantity and quality of lands available for recreation and commercial tourism activities. 	Direct and Indirect	Negative and Positive	Negligible	Local	Short-term to Long-Term	Frequent	Certain	Not Significant
 Navigation 	 Change to area and access of navigable watercourses, watercourse crossings and navigation 	 Net changes to the area and access of navigable watercourses, watercourse crossings, and navigation. 	Direct	Negative	Negligible	Local	Short-term to Long-Term	Infrequent	Probable	Not Significant



7.1.10.2.1 Net Changes to Protected Areas

With the implementation of mitigation measures, the net effect of Project construction on access and use, and values of provincial parks, conservation reserves, ANSIs, enhanced management areas during the construction stage is anticipated to be of low to moderate magnitude, given the limited proportion of parks and protected areas to be affected relative to the total area of provincial parks, conservation reserves, ANSIs, enhanced management areas with existing access corridors to the extent feasible, and users' continued access to a wide range of other areas of these same parks and conservation reserves throughout the construction and operation stages.

This net effect is considered to be local in geographic extent (i.e., experienced primarily within the Project footprint and limited areas of the parks and protected areas LSA), long term in duration, continual in frequency and certain to occur. Although access to and use of these parks and protected areas may face temporary restrictions during the construction, as construction will be completed using a staged approach, the Project will remain visible throughout the operation and maintenance phase due to the changes to visual aesthetics and vegetation and wetlands that will be known to persist throughout construction and operation over a very small segment of each provincial park, conservation reserve, ANSI, and enhanced management area.

7.1.10.2.2 Net Changes to the Management Objectives of Parks and Protected Areas

As presented in Section 7.1.9.1 (Parks and Protected Areas) and Table 7.1-5, the provision of transmission lines and utility corridors are expected to have minimal land use conflicts and incompatibilities with the land use planning legislation and the Project. However, some planning and management documents do not provide explicit guidance or permission for transmission line development and will need to be updated.

With the implementation of mitigation measures, including updating the relevant provincial park management plans and conservation reserve management statements to allow for the Project, this net effect is expected to be negligible in magnitude. Net changes are predicted to be local in geographic extent (i.e., primarily within the Project footprint and areas of the LSA) and permanent in duration, given that the effect will persist for the life of the Project, as well as once the Project has been completed. The effect will be continual in order to maintain the integrity and safety of the transmission line and certain to occur.

7.1.10.2.3 Net Changes to Land Use Policy and Planning

As presented in Section 7.1.9.2.1 (Changes to Land Use Policy and Planning) the planned uses are expected to have minimal land use conflicts and incompatibilities with the land use planning legislation and the Project. With the implementation of mitigation measures, including the conformity with provincial and local official plans, this net effect is expected to be negligible in magnitude. Net changes are predicted to be local in geographic extent (i.e., primarily within the Project footprint and areas of the LSA); and permanent in duration, given that the effect will persist for the life of the Project as well as once the Project has been completed. The effect will



be continual in order to maintain the integrity and safety of the transmission line and certain to occur.

7.1.10.2.4 Net Changes to Current Land Use

As presented in Section 7.1.9.2.2 (Changes to Current Land Use) there is a predicted net change to occupied and unoccupied Crown and private lands as a result of a need to change land uses to accommodate the Project footprint. It is expected that there will be residual effects to private lands in the form of loss of land use for some landowners with lands intersected by the Project footprint.

These net effect to some private lands is predicted to be negative and a direct result of the Project. The magnitude of the net effect is expected to decrease with the implementation of the Land Acquisition Compensation Program and voluntary settlement agreements with landowners, but is assessed to be moderate, as the effect will be discernable at the individual level and results in a potentially negative change to people's land use, but not one that is beyond the current system's capacity to respond. The net change is expected to be local in geographic extent, as the effect primarily occurs to the parcels that intersect the Project footprint and long-term in duration, given that the effect will persist for the life of the Project. The effect will be continual in order to maintain the integrity and safety of the transmission line and certain to occur.

7.1.10.2.5 Net Changes to the Area and Access of Forestry Resources

As presented in Section 7.1.9.3.1 (Changes to the Area and Access of Forestry Resources), the quantity of lands available for forestry resource uses will be reduced as a result of the Project, given that concurrent forestry resource activities cannot be conducted in the same location as Project construction, operations or maintenance.

With the implementation of mitigation measures and the low number of tenures/features within the proposed Project footprint and considering that some areas of the Project footprint will be reclaimed and returned to a pre-construction conditions, this net effect is predicted to be of negligible magnitude. Net changes in the quantity of lands available to conduct forestry resource use activities are predicted to be local in geographic extent (i.e., primarily within the Project footprint). Net effects are expected to be long-term in duration within the Project ROW and where new, permanent access roads may be required, and short-term in duration in other areas of the Project footprint (i.e., temporary workspaces that will be reclaimed after construction) The effect will be continual in order to maintain the integrity and safety of the transmission line and certain to occur.

7.1.10.2.6 Net Changes to the Area and Access of Mining Resources

As presented in Section 7.1.9.4.1 (Changes to the Area and Access of Mining Resources) the quantity of lands available for mining resource uses will be reduced as a result of the Project, given that concurrent mining resource activities cannot be conducted in the same location as



Project construction, operations or maintenance. However, with the implementation of mitigation measures, this net effect is predicted to be of negligible magnitude. Net changes in the quantity of lands available to conduct mining resource use activities are predicted to be local in geographic extent (i.e., primarily within the Project footprint and areas of the LSA) and long term in duration, given that the effect will persist for the life of the Project. The effect will be continual in order to maintain the integrity and safety of the transmission line and certain to occur.

7.1.10.2.7 Net Changes to the Area and Access of Aggregate Resources

Net effects on aggregate resources are deemed to be negative, as a direct result of the Project. As presented in Section 7.1.9.5.1 (Changes to the Area and Access of Aggregate Resources) the quantity of lands available for aggregate resources will be reduced as a result of the Project. Hydro One does not anticipate becoming the long-term permittee of new pits for the construction of the line, and there will be opportunities for other stakeholders to further exploit aggregate resources.

With the implementation of mitigation measures and given that a relatively low number of tenures or features fall within the proposed Project footprints, this net effect is predicted to be of negligible magnitude. Net changes in the quantity of lands available to conduct aggregate resource use activities are predicted to be local in geographic extent (i.e., primarily within the Project footprint and limited areas of the aggregate resources LSA) and long-term in duration, given that other aggregate resources of the land cannot be undertaken while the Project is operational. The effect will be continual in order to maintain the integrity and safety of the transmission line and certain to occur.

7.1.10.2.8 Net Changes to the Area and Access to Hunting, Trapping, Fishing and Associated Activities

Net effects are deemed to be both negative and positive, as a direct result of the Project. As set out in Section 7.1.9.6.1 (Changes to the Area and Access of to Hunting, Trapping, Fishing, and Associated Activities), these net effects may be considered to be positive or negative depending on the land user in question. Anglers are likely to perceive new, additional land base access to areas of the LSA as beneficial, creating new opportunities for them to increase their fishing activities. However, guided outfitters, who operate commercially and have benefited from limited access to certain areas (i.e., creating visitor experiences based on values of remoteness and wilderness) are likely to see the expansion of access as having a negative effect on their activities. Additionally, trappers registered to traplines that overlap the Project footprint have the potential to be affected due to impacts to the productivity of their traplines associated with a loss in mature forested habitat utilized by furbearers. The potential for changes in environmental conditions is of negligible magnitude. This net effect is predicted to be local in geographic extent and long term in duration, given that localized disturbances may occur at the various locations during active construction and may persist into the operations and maintenance stage, but is reversible. The effect will be continual in order to maintain the integrity and safety of the transmission line.



7.1.10.2.9 Net Changes to the Quantity and Quality of Lands Available for Recreation and Commercial Tourism Activities

Net effects on the land use quantity indicator under the recreation and commercial tourism criterion are deemed to be both negative and positive, as a direct result of the Project. As identified in Section 7.1.9.7.1 (Changes to the Quantity and Quality of Lands Available for Recreation and Commercial Tourism Activities), the analysis and through other Project experience in northern Ontario, these net effects may be considered to be positive or negative depending on the land user in question.

Non-consumptive recreation and commercial tourism users may also see this effect as beneficial, creating new opportunities for walking, hiking, biking, wildlife viewing, camping and other uses. However, guided outfitters, who operate commercially and have benefited from limited (remote) access to certain areas (i.e., creating visitor experiences based on values of remoteness and wilderness) are likely to see the expansion of access as having a negative effect on their activities.

It is recognized that some non-negligible net effects on biophysical conditions are predicted, and that tourism establishment areas, guided outfitters and tourism operators may have less flexibility and mobility in terms of their areas of active use than recreational and other land users (who may self select other segments of the recreation and commercial tourism LSA to conduct activities during periods of higher levels of Project nuisance, such as localized construction activities). However, these will be localized effects, with large areas of waterbodies, Crown land, provincial park land and private land that are still available for these activities where direct Project activities and indirect biophysical effects are not visible, audible or otherwise perceptible.

With the implementation of mitigation measures, recreation and commercial tourism opportunities are therefore expected to be maintained within the LSA. Based on these assessment results and with the implementation of mitigation measures outlined in Table 7.1-38, direct Project activity disturbances, as well as indirect disturbances to vegetation, the visual aesthetics, noise, and wildlife from construction and operation activities are expected to have a net effect of negligible magnitude on the overall quality of the recreation and tourism experience or the enjoyment in the LSA overall.

The net effect on recreation and commercial tourism is considered to be of negligible in magnitude because the effect is discernable (i.e., with the potential to result in positive or negative effects on land use), but manageable within the current system. Effects would be local in geographic extent, and occur over the long term (i.e., as increased access will be maintained indefinitely through construction, operation, and maintenance, stages of the Project).

7.1.10.2.10 Net Changes to the Area and Access of Navigable Watercourses, Watercourse Crossings, and Navigation

As set out in Section 7.1.9.8.1 (Changes to the Area and Access of Navigable Watercourses, Watercourse Crossings, and Navigation), equipment or waterbody crossing structures may impede or be a hazard to navigation during the construction phase, and possibly during



operation and maintenance phase if such structures are permanent. With the implementation of mitigation measures, such as obtaining necessary approvals beforehand and warning signs, where appropriate, the magnitude of the net effects on navigable waterways is negligible and negative in direction. The net effect will be infrequent and probable to occur. The net effect will be local as it will focus on the direct crossing area and be between short-term and long-term in duration depending on if the crossing is temporary or permanent.

7.1.10.3 Assessment of Significance

For each non-Indigenous land and resource use criterion identified as having a net effect, an assessment of significance was made based on the baseline characterization and the addition of the Project.

The assessment of significance of net effects of the Project is informed by the interaction between the significance factors, with magnitude, duration, and geographic extent being the most important factors. As set out in Section 5.6.5, a predicted net effect to the non-Indigenous land and resource use criteria would be considered significant if it is assessed as:

- High magnitude;
- Medium to long-term in duration; and
- Occurring at any geographic extent.

Further, a significant effect would cause the capacity of a land and resource use system to be exceeded on an ongoing and consistent basis, with the land and resource use system (and its users and operations, at the community level) being unlikely to be able to respond in a timely manner.

This significance rating framework integrates a qualitative understanding and observations of the non-Indigenous land and resource use context, including the resilience of resource users and operations to cope with potential Project induced changes and effects.

Based on the characterization of net effects of the Project on non-Indigenous land and resource use provided in Table 7.1-40 and the considerations above, the net effects identified are assessed to be not significant. Although there may be some discernable effects at the individual level, taking mitigation measures (including compensation) into account, the net effects are not expected to substantially interfere with land use at the individual and community level. Land use activities not warranting compensation can be maintained by land users at the community level and existing land use systems will have the capacity to respond due in part to the negligible magnitude of the predicted net effects.



7.1.11 Cumulative Effects Assessment

7.1.11.1 Assessment of Cumulative Effects

In addition to assessing the net environmental effects of the Project itself, this assessment also evaluated the significance of the net effects from the Project that overlap temporally and spatially with effects from other past, present, and RFDs and activities (i.e., cumulative effects).

For a criterion that has identified net effects, it is necessary to determine if the effects from the Project interact both temporally and spatially with effects from one or more past, present, or RFDs or activities, since the combined effects may differ in nature or extent from the effects of individual Project activities. Where information is available, the cumulative effects assessment estimates or predicts the contribution of effects from the Project and other human activities on the criteria, in the content of natural changes in the environment.

As described in Section 5.7 (Assess Cumulative Effects), net effects carried forward to the cumulative effects assessment analysis include net effects with a magnitude greater than negligible and with a likelihood of occurrence of 'probable' or 'certain'. For the assessment of net effects to non-Indigenous land and resource use, all but one of the net effects characterized in Table 7.1-40 were predicted to be probable or certain likelihood of occurrence, but negligible in magnitude; therefore, they were not carried forward to the cumulative effects assessment.

Two net effects were assessed to have a low to moderate or moderate magnitude and a certain likelihood of occurrence. Based on this assessment, the following net effect to non-Indigenous land and resource use was carried forward to the cumulative effects assessment:

- Net changes to current land use; and
- Net changes to protected areas.

A list of RFDs that were considered for this EA are presented in Section 9.0 (Cumulative Effects), Table 9.0-1. Out of these projects, the RFDs listed in Table 7.1-41 were identified as being probable to occur within the RSA.



Table 7.1-41:Reasonably Foreseeable Developments that Overlap with the Non-Indigenous Land and Resource UseRegional Study Area

ID	Project	Description	Spatial Overlap of Net Effects	Temporal Overlap of Net Effects	Included in Cumulative Effects Analysis
6	McIntyre Creek culvert rehabilitations	 Culvert rehabilitations at McIntyre Creek, 1 km west of Highway 102, Thunder Bay, and Wild Goose Creek, 6 km east of Highway 527, Shuniah 	No	Yes	No
7	Paved shoulders, resurfacing Highway 11	 Adding paved shoulders and resurfacing 35.3 km of Highway 11, starting 6.0 km east of Highway 102. 	No	Yes	No
8	Blind Creek culvert rehabilitation	 Culvert rehabilitation at Blind Creek, 7 km east of Highway 527, Shuniah. 	No	Yes	No
9	McVicars and Corbett Creek culverts rehabilitation	 Rehabilitation of McVicars Creek culvert, 6 km west of Hodder Ave, and Corbett Creek culvert, 5 km west of Highway 130, Thunder Bay 	No	Yes	No
10	John Street culvert replacement	 Replacement of the John Street culvert, west of Highway 11/17, Thunder Bay 	No	Yes	No
12	Highway 17, resurfacing	 Resurfacing of Highway 17 west, west of Highway 72, Dinorwic. 	No	Yes	No
13	Osaquan, Melgund, and Shoshowae Creek culverts, rehabilitation	 Rehabilitation of Osaquan Creek culver, 8 km west of Ignace, Melgund Creek culvert, 56 km west of Ignace, and Shoshowae Creek culvert, 10 km west of Dryden. 	No	Yes	No
17	Highway 11B resurfacing, paved shoulders	 Resurfacing and adding paved shoulders to Highway 11B, Atikokan 	No	Yes	No
18	Highway 11 resurfacing, paved shoulders	 Resurfacing and adding paved shoulders to Highway 11, from Oliver Road, Kakabeka to Shabaqua. 	No	Yes	No



ID	Project	Description	Spatial Overlap of Net Effects	Temporal Overlap of Net Effects	Included in Cumulative Effects Analysis
19	Highway 102, resurfacing	 Resurfacing Highway 102 west of Highway 589 to Highway 11/17, Thunder Bay. 	No	Yes	No
20	CPR Kaministiquia River bridge and CNR overhead bridges rehabilitation and removal	 Rehabilitation and removal of CPR overhead Kaministiquia River bridge and CNR overhead bridge, 4 km east of Highway 17, Sistonen's Corner. 	No	Yes	No
21	Seine River bridge, rehabilitation	 Rehabilitation of the Seine River bridge, 21 km north of Highway 11B, Atikokan 	No	Yes	No
22	Turtle and Little Turtle River bridges, rehabilitation	 Rehabilitation of Turtle River bridge, 44 km south of Highway 17, Atikokan, and Little Turtle River bridge, 79 km south of Highway 17, Atikokan 	No	Yes	No
23	Revell River No. 3 bridge, rehabilitation	 Rehabilitation of the Revell River No. 3 bridge, 1 km east of Highway 622, Ignace 	No	Yes	No
24	Treasury Metals Inc. Goliath Gold Project (Goliath Gold Complex)	 Construction of one open pit with underground development, a tailings storage facility, waste rock storage, overburden storage, low-grade stockpile, a 115-kV transmission line, and on-site electrical substation. The site is 15 km east of Dryden and 5 km north of Wabigoon. Operation is anticipated to be 12 years. The Project is part of the Goliath Gold Complex which currently refers to a prospective 65-km trend in a 330 km² land package comprised of three distinct projects located within the Wabigoon – Greenstone belt in the Dryden – Sioux Lookout Area of northwestern Ontario. 	Yes	Yes	Yes



ID	Project	Description	Spatial Overlap of Net Effects	Temporal Overlap of Net Effects	Included in Cumulative Effects Analysis
25	Rehabilitation of Steep Rock Mine	• Stabilization and remediation of the former Steep Rock Mine, including a plan for enhanced natural recovery that will increase the size of Steep Rock Lake in the coming decades.	Yes	Yes	Yes
29	Potential deep geological repository site	• Preliminary assessments by Nuclear Waste Management Organization are underway near Ignace to identify suitable areas for a deep geological repository site for nuclear waste. Currently no decision between choosing the Ignace location or a location in South Bruce, Bruce County.	Yes	Yes	Yes
31	Commercial Forestry	 Planned forestry harvest activities and roads derived from Forest Management Plans. 	Yes	Yes	Yes





With the exception of RFD IDs 24, 25, 29 and 31, the RFDs listed in Table 7.1-41 involve culvert rehabilitations and highway resurfacing. These projects are not expected to result in changes to current land use or parks and protected areas that would overlap spatially with the net effects of the Project, and therefore, are not assessed further. The RFD IDs 24, 25, 29 and 31 are further assessed below as they have the potential to have overlapping net effects with the Project for changes to current land use that could result in cumulative effects. The RFD IDs 24, 25, and 29 do not overlap with conservation reserves and provincial parks and therefore, are not assessed further for cumulative effects with respect to changes to protected areas. Commercial forestry and timber harvesting is generally restricted within conservation reserves and provincial parks; therefore, RFD ID 31 is not assessed further with respect to change to protected areas. As such, cumulative effects for changes to protected areas are not expected.

Goliath Gold Project

The RFD ID 24 (Goliath Gold Project) involves the construction, operation and decommissioning of an open pit and underground gold mine. Expected activities and features related to this mining project that may impact groundwater quality, levels, and flow include pit and mine excavations, blasting, mine dewatering, and mine water supply. The Goliath Gold Project is part of the Goliath Gold Complex (described in Table 7.1-42).

The area surrounding the Goliath Gold Complex is a mixture of abandoned homesteads, small hobby farms and residential dwellings. Most of the properties associated with the Goliath Gold Complex have been privately owned since around 1900 and have been acquired by Treasury Metals by means of private purchase agreements. Portions of these private land parcels will be developed for the Goliath Gold Complex. The Project, including the ROW and access roads, will cross the private properties owned by Treasury Metals and will require additional changes to the land use within these private parcels. Hydro One will continue to engage with Treasury Metals and negotiate an easement agreement for the use of their private property. The Goliath Gold Project is included within the cumulative effects analysis as there is potential for spatial and temporal overlap of net effects between this RFD and the Project that include changes to current land use (Crown and/or private lands).

Rehabilitation of Steep Rock Mine

The RFD ID 25 (Rehabilitation of Steep Rock Mine) involves the stabilization and remediation of the former Steep Rock Mine site including the raising of water levels in the flooded mine pit areas. It is expected that the former mine pit water levels will take decades to reach their final planned static elevation. Although the MNRF plans to engage with applicable stakeholders as appropriate throughout rehabilitation efforts, it is possible that the project may affect the use of Crown and/or private lands dependant on the final pit lake elevation. The Rehabilitation of Steep Rock Mine Project is included within the cumulative effects analysis as there is potential for spatial and temporal overlap of net effects between this RFD and the Project that include changes to current land use (Crown and/or private lands).





Potential Deep Geological Repository Site

The Nuclear Waste Management Organization (NWMO) is currently investigating two areas for a potential deep geological repository site including the Ignace and Bruce County areas. At this stage, it is unknown which area will be selected and the final location of the site within each respective area. If the Ignace location is selected, additional changes to the current land use will be required to accommodate the facility including the conversion of Crown land to private land. Therefore, this RFD is included within the cumulative effects analysis as there is potential for spatial and temporal overlap of net effects between this RFD and the Project that include changes to current land use (primarily Crown and/or private lands).

Commercial Forestry

The RFD ID 31 (commercial forestry) involves overall general commercial forestry activities that take place within the non-Indigenous land and resource use LSA and RSA including activities that may take place in the Boundary Waters Forest, the Crossroute-Sapawe Forest, the Dog River-Matawin Forest, the Dryden Forest, the English River Forest, the Lakehead Forest and the Wabigoon Forest.

Commercial forestry operations occurring throughout forest management areas are included within the cumulative effects analysis as there is potential for spatial and temporal overlap of net effects between this RFD and the Project that include changes to current land use (primarily Crown and/or private lands).

Summary of Cumulative Effects

A summary of the potential cumulative effects on non-Indigenous land and resource use is provided in Table 7.1-42 and further discussed below.

Other Projects/Activities	Potential Incremental Effect	Rationale for Potential Cumulative Effect
 ID #24: Goliath Gold Project (Goliath Gold Complex) 	 Changes to current land use. 	 Site preparation, construction, operation, and maintenance activities related to the Project may result in
 ID #25: Rehabilitation of Steep Rock Mine 		changes to current land use that may interact with the identified RFDs.
 ID #29: Potential deep geological repository site 		 Changes to current land use may include changes to Crown and/or private lands including:
 ID #31: Commercial Forestry 		 Loss of land use (Crown of private) through land acquisition (full or partial); and Impacts to aesthetics.

Table 7.1-42:Summary of Cumulative Effects Interactions for Non-Indigenous Land and
Resource Use



7.1.11.2 Cumulative Effects Characterization

Cumulative effects may occur where the Project and other RFDs both cause similar net effects within Project boundaries. As discussed in the previous section, net effects to non-Indigenous land and resource use may occur due to Project and RFD activities that overlap spatially and temporally.

The cumulative effects are characterized based on the incremental effects that result from the combination of the standalone net effects of the Project and the RFD.

The summary of cumulative effects on non-Indigenous land and resource use in the RSA is presented in Table 7.1-43.





Indicators	Cumulative Net Effect	Direction	Magnitude	Geographic Extent	Duration/ Irreversibility	Frequency	Likelihood of Occurrence	Significance
Change to Current Land Use	Cumulative changes to current land use	Negative	Moderate	Local	Long-term	Continual	Certain	Not Significant





7.1.11.3 Assessment of Significance

Although effects will occur largely at the LSA/RSA scale over the long-term, overall impairment to property and residential development is expected to be limited. Given the application of the various mitigation measures, including the implementation of landowner compensation and the landowner liaison program, the effects were assessed as moderate magnitude, local, long-term, and not significant (Table 7.1-43).

7.1.12 Monitoring

This section identifies any recommended effects monitoring to verify the prediction of the effects assessment and to verify the effectiveness of the mitigation measures and compliance monitoring to evaluate whether the Project has been constructed, implemented, and operated in accordance with the commitments made in the EA Report.

In order to evaluate effects on land and resource use, Hydro One will encourage land and resources users to share any issues and concerns with Hydro One and its contractor during the planning of the project (i.e., through the EA process or post-EA engagement) and throughout the construction stage. Monitoring of complaints and issue resolution will help minimize or remove any on-going effects to land and resource use.

7.1.13 **Prediction Confidence in the Assessment**

Prediction confidence is discussed qualitatively for the overall non-Indigenous land and resource use effects assessment results, after accounting for the steps used to reduce uncertainty. Level of confidence is typically based on expert judgement and is characterized as follows:

- Low judgement hampered by incomplete understanding of cause effect relationship or lack of data.
- Moderate reasonable understanding of cause effect relationship and adequate data.
- High good understanding of cause effect relationship and ample data.

Factors affecting confidence in the predictions made in the non-Indigenous land and resource use assessment include the following:

- Availability and accuracy of baseline data (e.g., accuracy of land use and tenure spatial data);
- Level of understanding of the strength of net and potential effects, in terms of the effects they are likely to have on each assessment endpoint;
- Level of understanding of the drivers of change in indicators and associated effects on assessment endpoints; and



• Level of certainty associated with the effectiveness of proposed mitigation measures.

The confidence in the predicted effects assessment for the non-Indigenous land and resource use environment is rated as moderate, considering the availability of information defining the Project components and surrounding landscape used for assessment, and the effectiveness of mitigation measures based on accepted and proven best management practices that have been applied to transmission line projects throughout North America. Spatial land use features and the availability of land and resource use opportunities in the non-Indigenous land and resource use LSAs are also well understood.

While there is high confidence in data from secondary sources, specific information on where and how recreation and commercial tourism occurs in the non-Indigenous Land and Resource Use LSAs and Project footprint is limited and less certain.

Some of the uncertainty in the assessment has been reduced by collecting local and regional spatial and qualitative data to facilitate an understanding of the non-Indigenous land and resource use context. This information provides some numerical data about activities, use rates, or frequencies of occurrence. Data sources include:

- Government spatial databases (e.g., MNRF LIO, CANVEC);
- Park management plans and statements; and
- Data sourced from outdoor tourism and recreation organizations and operators (qualitative, quantitative, and spatial).

Uncertainty was also addressed by adopting a conservative approach in effects assessment assumptions. For example, where participation levels, frequency, interactions and exact locations of various uses or activities are uncertain, it has been assumed that activities at known designated land use areas, amenities and/or features in the Project footprint would occur at some point during the Project and hence potentially interact with the Project. Adopting this approach, the overall rating of net effects on non-Indigenous land and resource use relates to a general understanding about access and use, and general land use activity and opportunities in the LSA.

7.1.14 Criteria Summary

Table 7.1-44 presents a summary of the assessment results for non-Indigenous land and resource use by criteria.

Criteria	Results
Provincial Parks, Conservation Reserves, ANSIs, and Enhanced Management Areas	 Net effects are assessed to be not significant. Cumulative effects are not assessed as net effects do not overlap with the RFDs.

Table 7.1-44: Non-Indigenous Land and Resource Use Assessment Summary



Criteria	Results
Land Lise Planning	 Net effects are assessed to be not significant.
Land Use Flamming	 Cumulative effects are assessed to be not significant.
	 Net effects are assessed to be not significant.
Forestry Resource Use	 Cumulative effects are not assessed as net effects are assessed to be negligible.
	 Net effects are assessed to be not significant.
Mining Resource Use	 Cumulative effects are not assessed as net effects are assessed to be negligible.
	 Net effects are assessed to be not significant.
Aggregate Resources	 Cumulative effects are not assessed as net effects are assessed to be negligible.
Hunting Tranning and	 Net effects are assessed to be not significant.
Fishing	 Cumulative effects are not assessed as net effects are assessed to be negligible.
Recreation and	 Negative net effects are predicted to be not significant.
Commercial Tourism	 Cumulative effects are not assessed as net effects are assessed to be negligible.
	 Negative net effects are predicted to be not significant.
Navigation	 Cumulative effects are not assessed as net effects are assessed to be negligible.



hydroone.com