



SNC • LAVALIN

Webequie Supply Road

Socio-Economic Study Plan

Webequie First Nation

6 January 2022
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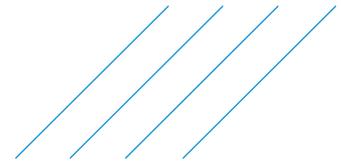


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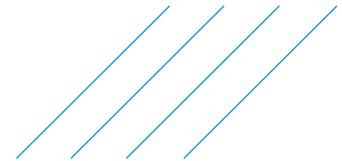
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1. Introduction

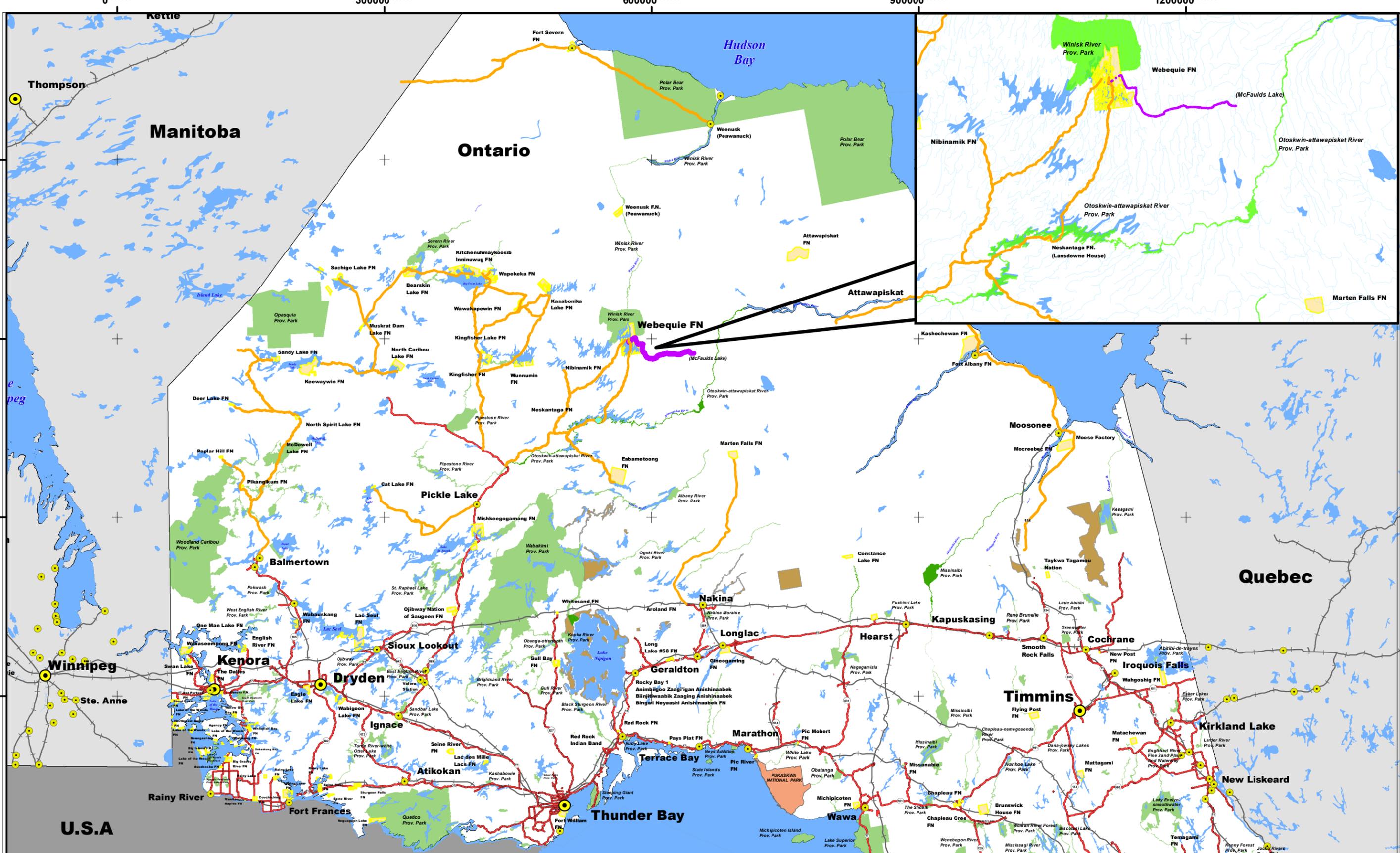
The proposed Webequie Supply Road (WSR) is a new all-season road of approximately 107 km in length from Webequie First Nation to the mineral deposit area near McFaulds Lake (also referred to as the Ring of Fire). A Location Plan for the Project is shown on **Figure 1**. The preliminary corridor for the road consists of a northwest-southeast segment running 51 km from Webequie First Nation to a 56 km segment running east-west before terminating near McFaulds Lake. A total of 17 km of the corridor is within Webequie First Nation Reserve lands.

The goals and objectives of the Webequie Supply Road Project are as follows:

- › To facilitate the movement of materials, supplies and people from the Webequie Airport to the area of existing mineral exploration activities and proposed mine developments in the McFaulds Lake area;
- › To provide employment and other economic development opportunities to WFN community members and businesses that reside in or around the community's reserve and traditional territory, while preserving their language and culture; and
- › To provide experience/training opportunities for youth to help encourage pursuit of additional skills through post-secondary education.

On May 3, 2018, the Ontario Minister of the Environment, Conservation and Parks (then Minister of the Environment and Climate Change) signed a voluntary agreement with Webequie First Nation to make the Webequie Supply Road Project subject to an Individual Environmental Assessment under Ontario's *Environmental Assessment Act*. The Project is also subject to meeting the requirements of the federal *Impact Assessment Act*. For the purposes of discussion in this study plan, the term "EA / IA or assessments" is meant to include both the provincial environmental assessment and the federal impact assessment.

The Socio-Economic Study Plan is being submitted to the Impact Assessment Agency of Canada (IAAC) and the Ontario Ministry of the Environment, Conservation and Parks (MECP) requesting that a coordinated review be undertaken with the objective of providing Webequie with technical guidance in meeting the requirements of the federal Tailored Impact Statement Guidelines (TISG) for the Project and to fulfil the commitment as stated in the provincial Terms of Reference (ToR) for the Project, which is pending approval by Ontario. It should be noted that Ontario's review of the study plan is preliminary and secondary to any further review and decisions related to a final and approved ToR.



Legend

- Proposed Preliminary Corridor for the Webeque Supply Road
- City/Town
- Winter Roads
- All-Season Roads
- Rail
- + Airports
- First Nation Reserve
- Federal National Park
- Provincial Park
- Conservation Reserve
- Waterbody

0 300000 600000 900000 1200000

WSR
WEBEQUIE
SUPPLY ROAD

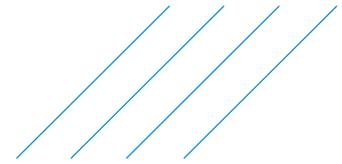
0 50 100 Km

N
Canada Lambert Conformal
Conic Projection

**Webeque Supply Road
Project Location**

Date: 2020/01/22 File Number: 649920 Sub Code: 0000

Figure Number: **1** Rev: **0**



2. Socio-Economic Study Plan

The following sections provide a description of the suggested approach to collecting information on existing socio-economic conditions; assessing socio-economic effects; identifying appropriate mitigation measures to eliminate or reduce potential effects; identifying “net” effects following mitigation; and assessing cumulative effects. The planned approach for baseline data collection and the assessment of the potential impacts of the WSR Project on social and economic components, including that of Indigenous peoples, is intended to meet the requirements of the TISG (Sections 10, 11, 12.3, 17 and 18) and, where applicable, the requirements of the MECP.

2.1. Methodology

The purpose of the socio-economic impact assessment (SEIA) is to characterize the manner and extent to which community socio-economic well-being could be affected (both positively and negatively) as a result of construction and operation/maintenance of the Webequie Supply Road. The SEIA will be integrated into the overall provincial and federal EA processes. The steps to be undertaken for this assessment are described in the following sections.

2.1.1. Indigenous Communities and Municipalities

The SEIA will include the 22 identified Indigenous communities that are to be consulted as part of the EA process, as shown in **Table 1** below. These communities have been identified by MECP and IAAC as communities whose exercise of Aboriginal and Treaty rights may be adversely affected by the Project and/or may have interests in the project. Communities marked with an asterisk are those whose Aboriginal and Treaty rights may be affected by the Project.

WFN further reviewed the lists of identified communities and assessed them based on the following criteria:

- › Geographically closer to the project area than others;
- › Known to have traditionally used some of the potentially affected lands in the past, or currently;
- › Downstream of the Project and may experience impacts as a result of effects to waterways;
- › Considered to have closer familial/clan connections to the members of WFN; and/or
- › Have been involved in all-season road planning in the Region, either directly with the WFN, or in consideration of all-season road planning that the WFN has been involved with in recent years.

Based on these factors, the 8 communities identified by Webequie will be offered the deepest or intensive consultation/engagement; this means that there will be 3 visits to these communities, with 2 visits to the remaining 14 communities and groups. However, where other communities may request more visits, this will be provided. Though technically not part of the SEIA, information garnered through this consultation/engagement process for the EA will be used to inform the SEIA where applicable.

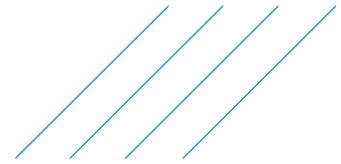


Table 1: Indigenous Communities to be Consulted and Included in the SEIA

Indigenous Community	Identified by WFN	Identified by MECP	Identified by IAAC
Webequie First Nation	✓	✓*	✓*
Aroland First Nation		✓*	✓*
Attawapiskat First Nation	✓	✓*	✓*
Constance Lake First Nation		✓*	✓
Eabametoong First Nation	✓	✓	✓*
Fort Albany First Nation		✓*	✓*
Ginoogaming First Nation		✓	✓
Kasabonika Lake First Nation	✓	✓*	✓*
Kaschechewan First Nation		✓*	✓
Kitchenuhmaykoosib Inninuwug		✓*	✓
Kingfisher Lake First Nation		✓*	
Long Lake #58 First Nation		✓	✓
Marten Falls First Nation	✓	✓*	✓*
Mishkeegogamang First Nation		✓	
Neskantaga First Nation	✓	✓*	✓*
Nibinamik First Nation	✓	✓*	✓*
North Caribou Lake First Nation		✓	
Wapekeka First Nation		✓	
Wawakapewin First Nation		✓*	
Weenusk (Peawanuck) First Nation	✓	✓*	✓*
Wunnumin Lake First Nation		✓*	
Metis Nation of Ontario – Region 2		✓	

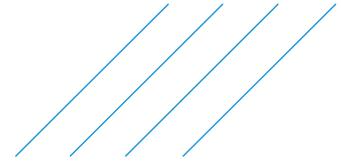
* Communities marked with an asterisk are those whose Aboriginal and Treaty rights may be affected by the Project.

As noted in the ToR, municipalities to be included in the assessment were identified based on their proximity to the proposed Webequie Supply Road, and include:

- › City of Thunder Bay
- › Municipality of Greenstone
- › Township of Pickle Lake
- › City of Timmins
- › Municipality of Sioux Lookout

As noted in IAAC's *Public Participation Plan* dated February 24, 2020 the following public and stakeholders will be engaged:

- › General public (individual residents)
- › Canada Chrome Corporation
- › Canadian Environmental Law Association
- › City of Thunder Bay
- › Geraldton Chamber of Commerce
- › Leuenberger Air Service
- › Longlac Chamber of Commerce
- › Mining Watch



- › Municipality of Greenstone
- › Municipality of Sioux Lookout
- › Mushkegowuk Council
- › Noront Resources Ltd.
- › Osgoode Hall Law School's Environmental Justice and Sustainability Clinic
- › Township of Pickle Lake
- › Wilderness North
- › Wildlife Conservation Society

Comments received from these participants during consultation activities will be addressed and included in the assessment as part of the Record of Consultation (RoC). Again, though technically not part of the SEIA, information garnered through the consultation/engagement process for the EA with the public and stakeholders will be used to inform the SEIA where applicable.

2.1.2. Spatial and Temporal Boundaries

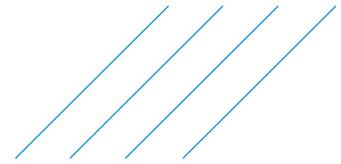
Spatial Boundaries

Spatial boundaries define the geographic extent within which the potential environmental effects of the Project are considered. As such, these spatial boundaries define the study areas for the effects assessment. Spatial boundaries are to be established for the EA / IA and will vary depending on the valued component and will be considered separately for each. The spatial boundaries to be used in the assessment will be refined and validated through input from federal and provincial departments and ministries, Indigenous groups, the public and other interested parties.

Spatial boundaries for the SEIA will be defined by taking into account the appropriate scale and spatial extent of potential socio-economic effects of the Project; community identified concerns and Indigenous Knowledge; and exercise of Aboriginal and Treaty rights.

At this stage, spatial boundaries proposed for the socio-economic effects assessment consist of three (3) study areas to capture the potential direct and indirect effects of the Project.

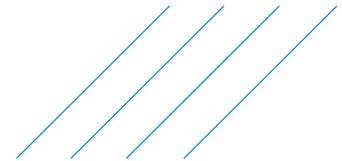
- › **Project Footprint (PF)** - is the area of direct disturbance (i.e., the physical area required for Project construction and operation). The PF is defined as the Webequie Supply Road Right-of-Way of 35 metres in width to be selected through the evaluation of route Alternative 1 and Alternative 2; and temporary or permanent areas needed to support the Project that include laydown yards, storage yards, construction camps, access roads and aggregate extraction sites.
- › **Local Study Area (LSA)** – is the area where largely direct, and indirect effects of the Project are likely to occur. The LSA is divided into two (2) sub-categories which reflect the differences between the criteria (or valued components) and indicators for the socio-economic environment that have been identified in Section 2.2 of this Study Plan.
 - The proposed LSA for **Population and Demographics, Community Services and Infrastructure and Local and Regional Economy** is defined as Webequie First Nation and those communities who have asserted shared territory with Webequie and/or who may experience the greatest potential effects of the Project. Listed below are First Nation communities included in the LSA (by distance from Alternative Routes 1 and 2 and supportive infrastructure):



- Marten Falls First Nation
 - Nibinamik First Nation
 - Neskantanga First Nation
 - Kasabonika Lake First Nation
 - Eabametoong First Nation
 - Attawapiskat First Nation
 - Weenusk First Nation
- The LSA for **Land and Resource Use (land use compatibility, recreation and tourism, provincial parks and protected areas)** is proposed to correspond to the outermost boundaries of the combined LSAs for the fish and fish habitat, surface water, vegetation, general wildlife, and air quality valued components. It is defined as a 1 km buffer from either side of the centreline of the supply road Alternative 1 and Alternative 2, and 500 m from supportive infrastructure (camps, aggregate/rock source areas, access roads).
 - › **Regional Study Area (RSA)** – is the area where potential, largely indirect and cumulative effects of the Project in the broader, regional context may occur. Similar to the LSA, the RSA is divided into two (2) sub-categories which reflect the differences between the criteria and indicators for the socio-economic environment that have been identified in Section 2.2 of this Study Plan.
 - The RSA for **Population and Demographics, Community Services and Infrastructure, and Local and Regional Economy** encompasses the area outside of the LSA used to measure broader-scale existing socio-economic conditions and effects that may occur in a regional context. The proposed RSA consist of the 14 remaining First Nations as identified by the Crown (Canada/Ontario) for engagement and consultation that are located within the regional unorganized districts of Cochrane, Kenora and Thunder Bay; and the surrounding nearby townships and cities/municipalities (i.e., City of Thunder Bay, Municipality of Greenstone, Township of Pickle Lake, Municipality of Sioux Lookout).
 - The RSA for **Land and Resource Use (e.g., land use compatibility, recreation and tourism, provincial parks and protected areas)** corresponds to the outermost boundaries of the combined RSAs for fish and fish habitat, surface water, vegetation, and general wildlife valued components given that these components may be relied on by Indigenous peoples or others for land and resource use. The RSA is the combined area of the quaternary watersheds crossed by route Alternative 1 and Alternative 2.

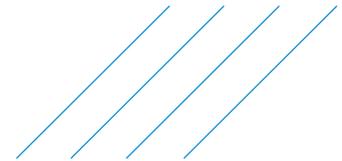
The study areas were selected to characterize existing environmental conditions and predict the direct and indirect changes from the Project on the valued components of the socio-economic environment on a continuum of increasing spatial scales from the Project Footprint to broader, regional levels. The preliminary selection of study areas also considered the socio-economic valued components and related indicators for evaluation.

In establishing the LSA and RSA, consideration was given to the extent to which the project potentially affects socio-economic valued components during each phase (construction and operation and maintenance) of the Project. Understanding the various aspects of the Project that affect these interests will be based on analysis of the socio-economic criteria listed in Section 2.2 once validated by Indigenous



communities, the public and stakeholders. The Project Team will consult and engage with Indigenous communities and the public to determine and finalize the appropriate LSA and RSA for the socio-economic environment.

The collection of socio-economic baseline data and effects assessment relative to the spatial boundaries will focus on the set of supply road alternatives within the preliminary proposed 2 km wide corridor, as identified in the federal Impact Assessment Detailed Project Description (November 2019) and the provincial Environmental Assessment Terms of Reference (August 2020). The alternatives include the Webequie First Nation community's preferred route (referred to as Alternative 1) along the centreline of an approximately 2 km wide preliminary proposed corridor, and the soil and terrain route (referred to as Alternative 2) within the same corridor. The route alternatives are shown in **Figure 2** with the LSA and RSA boundaries for each route alternative combined to reflect the socio-economic study area for the Project. At this stage of the EA / IA process, the supportive infrastructure components have yet to be determined and will be included in the Environmental Assessment Report / Impact Statement. While most of the Project components are expected to be located within the preliminary proposed 2 km wide corridor, benefits (e.g., reduced environmental disturbance, avoidance of sensitive features, concerns received through consultation) for locating Project components on lands outside this 2 km wide area may become known during the EA / IA process. If the need to locate Project components outside the 2 km wide area is determined to be required, or of benefit to the Project, the study area may be adjusted.



Temporal Boundaries

Implementation of the Project will occur in phases, which are temporal boundaries that establish a timeframe for consideration of baseline information and potential effects of the Project. The Project is planned to occur in two main phases as described below:

- › **Construction Phase:** All the activities for development of the road and supportive infrastructure from the start of construction to the start of operation and maintenance of the WSR (estimated 3-6 years); and
- › **Operations Phase:** All activities for operation and maintenance of the road and any permanent supportive infrastructure (e.g., maintenance yard, aggregate pit/quarry) that will start after construction (75-year period is used for assessment).

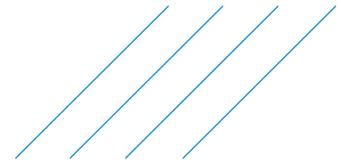
The Project is proposed to be operated for an indeterminate time period; therefore, retirement (decommissioning/abandonment/closure) is not anticipated and will not be considered in the EA / IA. The final temporal boundaries to be used for assessment will be based on regulatory agency guidance, professional judgement and input received through the consultation process for the Project.

2.1.3. Gender Based Analysis Plus (GBA+)

Gender Based Analysis Plus or GBA+ is a required analytical approach for any projects operating under Section 22 of the IAA and will need to be applied to the WSR SEIA. GBA+ is a required approach given the recognition that historical and current power structures (e.g., laws, policies, governments and other institutions) have shaped society and created inequalities. This is especially important with respect to legacies of colonialism and the impacts on Indigenous peoples and in particular, Indigenous women. Today, there is an epidemic of violence against Indigenous women and girls, where violence-related deaths among Indigenous women is five times higher than the national average for Canadian women (Kuokkanen 2011 cited in Bond and Quinlan 2018 p. 24), and the severity of this issue is often exacerbated by the presence of industrial projects near Indigenous communities (Bond and Quinlan 2018 p. 23). Indigenous women are also less likely to benefit from employment opportunities associated with resource development projects (Dalseg 2018).

In the context of EA / IA, GBA+ is a means to understand and assess how potential project effects could disproportionately impact more vulnerable groups including women, youth, two-spirited and gender diverse persons, and Elders. It is particularly important to consider how the impacts, benefits, and risks of a project could be unequally distributed across different sub-groups within a community. From there, more plans and mechanisms can be put in place to avoid and/or mitigate the disproportionate effects on these sub-groups.

GBA+ is not a method unto itself, but an approach that is associated with a variety of standard quantitative and qualitative data collection tools. Details regarding how GBA+ will be applied to baseline information collection and the effects assessment are detailed in the respective sections of this study plan, as well as in a separate GBA+ socio-economic study plan.



2.2. Criteria and Indicators

Valued components are human and physical aspects of the environment that people consider important from Indigenous, public, or scientific perspectives, therefore warranting detailed consideration in an EA / IA (Noble, 2015, p.105). The assessment will focus on valued components that have physical, biological, social, economic, cultural, and health importance to Indigenous groups, public, federal and provincial authorities and interested parties, and have the potential for change as a result of the Project. Socio-economic valued components have been identified in the federal WSR TISG and WSR ToR and are, in part, based on what Indigenous communities and groups, the public and stakeholders identify as important to them in the EA process to date for the WSR Project.

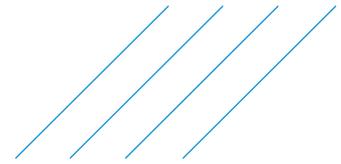
Preliminary socio-economic criteria and indicators were also identified to evaluate and measure the potential effects of the WSR Project. The SEIA will examine social and economic effects, including potential changes to social and/or economic conditions based on the indicators, and the positive and negative consequences of these changes.

Table 2 below presents a preliminary list of criteria and indicators and reflects input received during the WSR engagement and consultation activities undertaken to date, such as input into the WSR TISG and WSR ToR. Indicators for which GBA+ will be applied are also identified in this table. Indigenous communities, groups and the public will be consulted and will have the opportunity to provide input and feedback to help further refine the criteria and indicators. A comprehensive list is to be determined as part of the EA process and will be documented in the Environmental Assessment Report/Impact Statement (EAR/IS). The table includes a preliminary list of sources that have been or will be used in collecting baseline information for that particular socio-economic criterion. Note that the list of sources listed in the table is not exhaustive; this list will be provided in the EAR/IS once baseline information collection is complete.

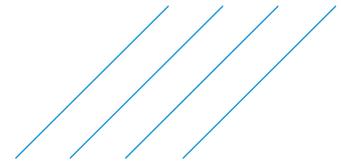
Table 2: Socio-Economic Criteria and Indicators

Domain	Criteria/Valued Component	Indicator	Sources
Demographics	Population and Demographics	<ul style="list-style-type: none"> Change to population Change in sub-group population (women, men, youth – GBA+) 	<ul style="list-style-type: none"> Statistics Canada - Aboriginal Population Profile, 2006, 2011, 2016 Census Results¹ Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) First Nation Profiles Municipal, provincial and Indigenous government websites Municipal plans and reports Provincial plans and reports
Community Services and Infrastructure	Housing and Accommodations	<ul style="list-style-type: none"> Demand for permanent and and/or temporary housing 	<ul style="list-style-type: none"> Indigenous consultation and Indigenous Knowledge

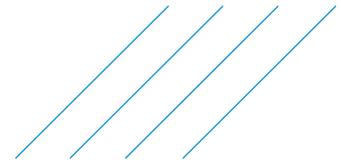
¹ 2021 Census data to be added once available.



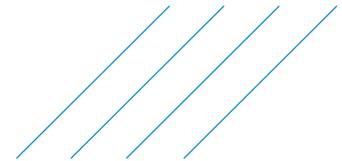
Domain	Criteria/Valued Component	Indicator	Sources
		<ul style="list-style-type: none"> • Housing costs and affordability <ul style="list-style-type: none"> ○ Average housing cost ○ Average rent • Change to number of people living in a home • Supply of housing <ul style="list-style-type: none"> ○ Total number of new housing starts and completions • Quality of housing 	<ul style="list-style-type: none"> • Key informant interviews and social surveys • Statistics Canada Census Community Profiles and National Household Survey • Municipal and provincial government websites • Stakeholder engagement • Local Business operators and service providers • Academic literature
	Social and Infrastructure Services <ul style="list-style-type: none"> ○ Education ○ Childcare ○ Water ○ Waste ○ Energy ○ Communications 	<ul style="list-style-type: none"> • Demand for community services and/or infrastructure • Supply and capacity of community services and/or infrastructure 	<ul style="list-style-type: none"> • Key informant interviews • Social surveys • Consultation and engagement activities • Municipal, provincial and Indigenous government websites, plans and reports • Local service providers • Industry reports • Academic literature
	Transportation	<ul style="list-style-type: none"> • Road Transportation <ul style="list-style-type: none"> ○ Change in traffic volume (autos, trucks) on existing road connection (winter) to provincial road network ○ Change in opportunities for travel and road use • Air Transportation <ul style="list-style-type: none"> ○ Demand for air and shipping services 	<ul style="list-style-type: none"> • Key informant interviews • Social surveys • Consultation and engagement activities • Local service providers (i.e., winter road) • Industry reports • Academic literature
	Community Well-Being and Safety	<ul style="list-style-type: none"> • Social Cohesion and Culture <ul style="list-style-type: none"> ○ Quantity of social connections ○ Quality of social connections • Participation in social and/or cultural events <ul style="list-style-type: none"> ○ Participation rate (by event) ○ Number of new (first-time) attendees to regularly held (e.g., annual) events 	<ul style="list-style-type: none"> • Social surveys • Focus groups • Key informant interviews • Police reports • Social service reports • Non-Government Organization and Interest group reports • Municipal, provincial and Indigenous government websites, plans and reports • EA air and noise studies



Domain	Criteria/Valued Component	Indicator	Sources
		<ul style="list-style-type: none"> ○ Total number of social and/or cultural events held • Safety <ul style="list-style-type: none"> ○ Perceptions of safety ○ Traffic safety ○ Domestic violence rate ○ Sexual assault rate ○ Physical assault rate • Nuisance <ul style="list-style-type: none"> ○ Air quality (e.g., dust) ○ Noise levels 	
Land and Resource Use (non-indigenous)	Land Use Compatibility	<ul style="list-style-type: none"> • Compatibility with existing and proposed land uses 	<ul style="list-style-type: none"> • Spatial data on existing planned land uses • Land use plans (municipal, provincial and federal) - Provincial Policy Statement 2020 (Ministry of Municipal Affairs and Housing 2020); and Growth Plan for Northern Ontario (Ministry of Northern • Development, Mines and Forestry 2011) • Community-based land use planning
	Recreation and Tourism (camps, trails, waterways, etc.)	<ul style="list-style-type: none"> • Location/number/type of activities or users • Land and waterway disruption and access • Resource availability of select species (fish, wildlife) or their habitat 	<ul style="list-style-type: none"> • Indigenous Knowledge • IKLU studies • Indigenous engagement and consultation • Business Operators
	Provincial Parks and Protected Areas (Areas of Natural and Scientific Interest, Conservation Reserves)	<ul style="list-style-type: none"> • Total number and total disturbed area (ha) of Provincial Parks and Protected Areas 	<ul style="list-style-type: none"> • Indigenous consultation and Indigenous Knowledge • MNRF • Business Operators • Desktop studies
Economic	Regional and Local Economy	<ul style="list-style-type: none"> • Economic and Procurement Opportunities <ul style="list-style-type: none"> ○ Business opportunities ○ Regional economic activity ○ Change in output/ 	<ul style="list-style-type: none"> • Statistics Canada information on economic sectors • Provincial and regional economic development reports • Business Operators • First Nations employment



Domain	Criteria/Valued Component	Indicator	Sources
		<ul style="list-style-type: none"> ○ GDP value-added ○ Value of procurement opportunities ● Labour Force and Employment <ul style="list-style-type: none"> ○ Employment/ job opportunities ○ Employment and unemployment rates ○ Labour force participation rate ○ Labour income ○ Training opportunities ● Government Finances <ul style="list-style-type: none"> ○ Changes to expenditures ○ Taxation and Revenue ● Cost of Living <ul style="list-style-type: none"> ○ Price changes at an order of magnitude level for key consumptive goods ○ Annual Average Consumer Price Index (CPI) ○ Average retail prices for select products (e.g., food, fuel, transportation) ○ Average annual spending on goods and services per household ● Mining and Aggregate Activity <ul style="list-style-type: none"> ○ Area (ha) of significant aggregate deposits affected ○ Area (ha) or number of active mines ○ Area (ha) or number of mining claims 	<ul style="list-style-type: none"> skills inventory ● First Nations business inventory ● Municipal, provincial and Indigenous government websites ● Municipal plans and reports on economic development ● Provincial plans and reports on regional sector development ● Local service providers such as infrastructure and utility providers ● Regional tourism reports ● Industry reports (e.g., mining and forestry) ● Municipal and Indigenous community financial statements ● Social surveys ● Focus groups ● Key informant interviews ● Spatial Data on existing mining and aggregate areas ● Stakeholder group information ● Ontario's Land Information (OLI) database



2.3. Collection of Baseline Information

Collection of socio-economic baseline information will involve a mixed methods approach. Mixed methods refer to a combination of quantitative and qualitative methods and associated data collection tools. By combining these methods, a better understanding of issues and complex phenomena can be developed than by either method alone (Creswell and Clark 2007). This is because quantitative and qualitative methods serve different study purposes and are designed to address different types of research questions and information needs. The quantitative approach allows the Project Team to collect information at a broader scale, on a wide range and number of indicators. The qualitative approach complements the quantitative approach as its purpose is to understand particular topics more in-depth from the perspective of lived experience, and the meanings attached to that experience (Winchester and Rofe, 2016). For the qualitative approach, the Project Team and community facilitators will pose guiding, open-ended questions to a small number of knowledgeable, informed, and diverse participants.

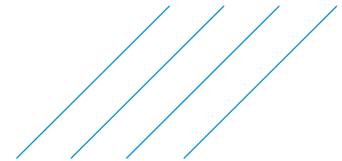
Socio-economic baseline information will also be collected through both primary and secondary information sources. Gaps found in secondary information have been used to inform the primary information needs of the Project.

2.3.1. Secondary Information

A desktop review of published social and economic data was conducted for the 22 Indigenous communities/groups potentially impacted by the WSR as well as the municipalities (public). While only secondary information is being collected for the municipalities, both primary and secondary information will be collected for the 22 potentially impacted Indigenous communities/groups. The review included a search of government websites (such as Statistics Canada 2016 Census Profiles, First Nations Community Profiles, Indigenous Services Canada), Indigenous community websites, municipal websites, local and provincial police and emergency service websites, municipal economic development plans and other open-source data to identify community demographics, infrastructure, economic development, social services, safety, housing, etc. In addition, the following WFN community documents were obtained from the community and reviewed:

- › Webequie First Nation Draft Comprehensive Community Plan (2021).
- › Webequie First Nation Community Based Land Use Plan. 3 V 4.3. 4 “Webequie Anishininiwuk Ahki Ohnahchiikaywin”. Prepared by WFN. 2019. (WFN, 2019a).
- › Webequie First Nation On-Reserve Land Use Plan. Dated May 31, 2019. (WFN, 2019b).
- › Webequie First Nation Community Well-Being Baseline Study Summary- Summary Report 2. June 2014.
- › Webequie First Nation Housing Assessment. n.d.

Similar documents from other potentially impacted communities will be requested and reviewed where permitted. Where sources provide disaggregated data based on subgroups (i.e. male and female statistics, age, etc.), this data will be used in the baseline to characterize the sub-groups and to support the gender-based analysis plus (GBA+) framework.



2.3.2. Primary Information

Community Socio-Economic Surveys

Socio-economic surveys are proposed to be administered to 22 potentially impacted Indigenous communities and groups. These surveys will be administered through a combination of in-person and online methods, including at community meetings, frequently visited locations within the community (e.g. a store and band office), and/or through the use of Survey Monkey, an online survey tool. The Project Team will engage with Indigenous communities to determine the appropriate approach to deliver the socio-economic survey, and this will also depend on the intensity/depth of consultation required. While a high response rate will aim to be achieved, this will at least partially depend on the administration method(s) used.² The administration method will vary according to community. The 8 Indigenous communities in the Local Study Area (refer to section 2.1.2) will receive a more intensive effort to participate in completing the survey and will include use of in-person trained survey administrators or community coordinators, as well as the online survey tool.

The other communities and groups located within the Regional Study Area will be provided with the survey at community consultation events and online. Administration methods may also depend on capacity, protocols, and factors such as COVID-19 restrictions in place. In order to undertake a GBA+ approach, the aim will be to achieve a diversity of responses from different sub-groups within the communities including women, men, youth, and Elders.

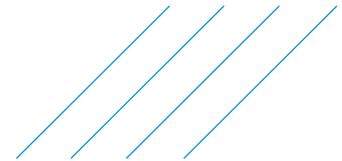
The surveys will include questions about demographics (age, gender, income, education, employment), housing, social services, safety, and social cohesion. The questions developed are based on the criteria and indicators for the WSR Project. All Indigenous communities will be notified about the survey via email/letter and they are also being made aware of the socio-economic survey through radio call-in shows and livestream sessions broadcast to all communities. A link to Survey Monkey will also be posted on community social media sites, with permission.

The survey will be written in plain-language and pilot tested to improve the validity and reliability of the data collection instrument. It will also be translated to Oji-Cree and/or Cree with the aid of a translator if/when it is being administered in person. The survey will include a guide with directions and explanations of the questions, and this will also be provided to any in-person survey administrators through a short training program. Information provided in the surveys will be anonymous and confidential and used solely for the purposes of the Project.

Survey statistics will be analyzed using Survey Monkey with further rigour added to the analytical process if needed through exporting results to Excel and applying Chi-square tests to the data³. Analysis to be undertaken will be based on criteria and indicators in **Table 2.0**. Data will be disaggregated by gender and age in order to address GBA+ requirements (see Table 2.0 for indicators where GBA+ will be applied). Survey findings will be available for viewing and feedback as part of community engagement activities on the draft baseline report.

² Certain administration methods would be expected to achieve higher response rates, such as in-person surveys (Gillham, 2008), but this also depends on other factors (de Vaus, 2014).

³ The Chi-square test measures the relationship, or lack thereof, between variables. The test compares the pattern of observed responses against what we would expect to see if there was no relationship between the variables (Statistics Solutions, 2021). This test measures how likely the relationship is to be a result of chance (Gillham, 2008).



Focus Groups

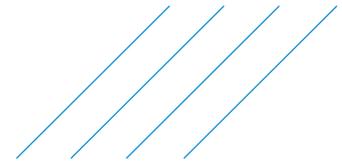
Four focus groups will be conducted for each of the 8 communities who are potentially more socially and economically impacted by the Webequie Supply Road Project (see Table 1 and section 2.1.2). Focus groups allow for a richer and more in-depth understanding of experiences and issues to emerge based on differences within the communities. In contrast to the questionnaire surveys, participants will have an opportunity to talk at length about issues to facilitate greater understanding and contextual insights. In addition, participant interactions within focus groups produce a synergistic effect, which can generate a significant amount of information compared to interviews alone (Stewart, Shamdasani, and Rook, 2007; Berg, 1989 cited in Hay, 2016). As such, there will be four focus groups undertaken with adult women (mothers and non-mothers), Elders, and male and female youth. These will be undertaken with the goal of understanding the power disparities, inequalities, and vulnerabilities that are likely to exist in communities where industrial projects have the potential to exacerbate these vulnerabilities (Bond and Quinlan 2018 p. 23). The topics to be explored through these focus groups include the following, and are based on TISG requirements, with targeted focus groups to be conducted for each topic identified in brackets):

- › Experiences with development and aspirations for, as well as concerns about development (all);
- › Access, ownership and control of resources e.g. financial, information (women);
- › Education and training needs and interests (all);
- › Employment opportunities and barriers (women and youth);
- › Safety and experiences of gender-based violence⁴; concerns about violence⁵ in relation to the Project or future mining development (women, female Elders, and female youth);
- › Transportation and mobility (all);
- › Access to emergency and support services and networks (all).

For certain topics, particularly those that are more sensitive and where participants may be hesitant to disclose information about themselves, fictional examples may be introduced that participants can respond to (see for example Goss and Leinbach, 1996). Focus groups will aim to comprise 6-10 participants each (see Cameron, 2016) and take approximately 2-3 hours to complete. Participants will be recruited through the Webequie Project Team (for WFN) and/or other community gatekeepers who can help to identify potential participants. Cultural protocols will be followed (e.g. prayers and smudging), where requested. For the focus groups with Indigenous women and female youth, it would be ideal to have a trained female Indigenous facilitator who the participants may be familiar with and who they trust. In addition, it will most likely be necessary to have these focus groups carried out in-person (as opposed to virtually), though this will depend on provincial and community COVID-19 restrictions in place, as well as participant preferences and comfort levels. Focus groups will be recorded either by audio/video recording and also have a notetaker present. Focus group information will be organized and analysed with the aid of the NVivo qualitative software package that allows for systematic thematic analysis of large amounts of text-based information. Copies of transcripts and/or findings will be provided to focus group participants for validation and feedback.

⁴ Given the nature and importance of this topic, it may be necessary to have focus groups entirely dedicated to these issues.

⁵ Violence may be understood and interpreted in various forms, and this will also be dependent on participant constructions of violence. However, given the context of impact assessment and future industrial camps and possible mining activities in proximity to communities, particularly WFN, violence and vulnerabilities to Indigenous women and children may be in terms of sexual harassment and assault; domestic violence; sex trade and sex trafficking; and sexually transmitted infections among other issues.



Key Informant Interviews

Key informant interviews will be conducted with individuals who have special knowledge or information to contribute to the Webequie Supply Road socio-economic baseline study. This special knowledge includes (for example) community infrastructure capacity and service availability and needs, history with developers, economic development aims, Indigenous owned businesses, housing supply and demand, and crime rates. Key informants will be asked questions that also speak to the issues and needs of vulnerable sub-groups such as women, youth, and Elders. Key informants could include Chiefs, Councillors, band administration staff, and social service providers who will be interviewed either by telephone, videoconference, or during in-person consultation and engagement activities. A preliminary list of potential key informants will be drafted, but the Project Team will also work with Chief and Council as well as gatekeepers in the Indigenous communities to identify and confirm key informants to participate in the interviews. Interviews will be recorded electronically to assist in the preparation of transcripts and findings will be organized thematically. All information collected will be subject to OCAP[®] (ownership, control, access, and possession principles) (The First Nations Information Governance Centre 2021). Copies of transcripts and/or findings will be provided to interview participants for validation and feedback.

2.4. Effects Assessment Approach

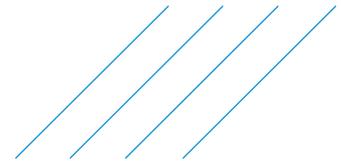
The approach for the assessment has been developed to satisfy regulatory requirements under the Environmental Assessment Act and is based on the MECP Code of Practice: Preparing and Reviewing Terms of Reference for Environmental Assessments in Ontario (MOECC 2014), and the approved Terms of Reference for the Project (MECP notice of approval dated October 8, 2021). The approach for the assessment has also been developed to meet the requirements of the federal TISG and specifically Section 13 – Effects Assessment.

2.4.1. Consideration and Evaluation of Alternatives

The assessment process requires that two types of project alternatives be considered: “alternatives to” the Undertaking (i.e., functionally different ways of addressing an identified problem or opportunity to arrive at the preferred planning solution) and “alternative methods” of carrying out the Undertaking (options for implementing the preferred planning solution). The consideration and evaluation of alternatives to the Undertaking were documented in the federal Impact Assessment Detailed Project Description (November 2019) and the provincial Environmental Assessment Terms of Reference (August 2020) and concluded that developing a new all-season road between Webequie and the McFaulds Lake area is the preferred alternative. This analysis and conclusion are not proposed to be re-examined as part of the assessment process but will be documented in the EAR/IS. Therefore, in keeping with the focused approach the preferred planning alternative (developing a new all-season road) has been carried forward to the initial consideration of alternative methods of carrying out the Undertaking.

The consideration of alternatives methods will focus on the supply road alternatives within the proposed preliminary corridor. These alternatives include the Webequie First Nation community’s preferred route (referred to as Alternative 1) for the supply road along the centreline of an approximately 2 km wide preliminary preferred corridor and the optimal geotechnical route (referred to as Alternative 2) within the same corridor (Refer to **Figure 2**).

In addition, the following alternative methods related to supportive infrastructure and the preferred supply route will be examined.



- › Alternative sites for temporary and/or permanent aggregate extraction pits and production facilities needed for construction and operation of the road, including access roads to these sites;
- › Alternative sites for supportive infrastructure (i.e., temporary laydown and storage areas, construction camps, including access roads to these areas);
- › Watercourse crossing structure types (i.e., culverts, bridges), span length, lifecycle, and construction staging methods at waterbody crossings;
- › Road attributes, including roadbed foundation; horizontal alignment, vertical alignment (elevation/profile), and adjustments to the cross-section and right-of-way (ROW) width of the corridor.

The assessment of alternatives will include socio-economic criteria and indicators for the comparative analysis. As noted previously the criteria and indicators will be developed in detail as part of the assessment process through input from the engagement and consultation activities with Indigenous communities, the public and stakeholders. Both a quantitative and/or qualitative assessment of alternatives for each criterion will be conducted to allow for a comparison of the advantages and disadvantages and selection of a preliminary recommended route for the WSR and the sites/access routes for supportive infrastructure.

2.4.2. Assessment of Net Effects

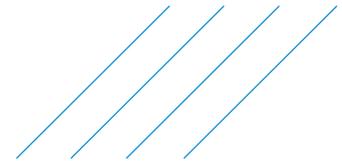
A step-wise process will be used to assess the environmental effects of the Project in a systematic and transparent manner once the relevant project elements and activities and their interactions, assessment boundaries, and relevant environmental criteria and indicators are identified and finalized through the engagement and consultation process. The net effects assessment method will include the following primary steps:

- › Identification of potential effects;
- › Identification of technically and economically feasible mitigation measures;
- › Prediction of net effects following implementation of mitigation measures; and
- › Evaluation of the predicted net effects (i.e., describe and determine the magnitude, duration, extent, frequency, and significance of the predicted net effects).

2.4.2.1. Identification of Potential Socio-Economic Effects

The net effects assessment will consider the potential interactions between the project components and activities (the 'triggers') and the criteria within the identified spatial boundaries and phases of the Project (i.e., construction and operation). Potential effects of the Project on valued components and criteria will be determined by comparing baseline conditions to those expected to result from the construction and operation and maintenance of the Project. Potential effects will be described for each assessment criterion, including an indication of whether they are expected to be direct (i.e., as a result of a project component or activity affecting a valued component), or indirect (i.e., as a result of a change to one valued component affecting another valued component). Relevant project activities will be analysed individually to determine if there is a plausible pathway for an effect on valued components.

Potential socio-economic effects will be identified through a pathways of effects analysis. Potential Project-socio-economic interactions will be identified through a review of the Project Description and existing socio-economic conditions, as characterized by social surveys, focus groups, key informant interviews, consultation and engagement activities, public and stakeholder input, local knowledge, and



desktop research. The pathways of effects analysis will also take into consideration existing literature/case studies of similar types of projects. This review focuses on the possible interactions between the socio-economic criteria and the Project within the study areas. Associated Project works and activities will be assessed to determine potential effects on the criteria during Project construction and operation. This could take the form of a Multiple Account Benefit-Cost Analysis (MABCA) (Shaffer, 2010) with the use of flow diagrams, scenarios, and cause-effect matrices (Mackenzie Valley Environmental Impact Review Board, 2007).

Effects to the social and economic valued components indicators as a result of the Project will consider the specific items contained in Sections 17 and 18 of the TISG.

Application of GBA+ to Identification of Socio-Economic Effects

A GBA+ lens will be applied to identification of effects due to the Project using a pathways approach based on what is known about the Project, existing socio-economic conditions disaggregated by gender and age, engagement and consultation activities, as well as literature that identifies GBA+ effects based on similar types of projects, and the potential for disproportionately adverse effects on women, Elders, and/or youth. The identification of possible positive impacts on women, Elders, and youth will also be important.

2.4.2.2. Identification of Mitigation Measures

Once potential effects are identified, technically and economically feasible mitigation measures to avoid and minimize potential adverse effects will be identified for each phase of the Project. Design considerations and mitigation measures will be identified to offset, eliminate, or avoid potential adverse effects and will be described in the EAR/IS. Refinements to these measures may also be made in the future detail design phase of the Project. Mitigation measures will be developed for the Project based on:

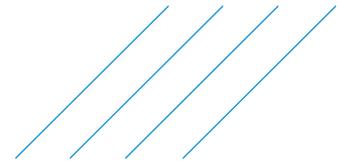
- › Knowledge and experience of the Project Team with linear infrastructure developments;
- › Industry best management practices and applicable agency requirements and guidance; and
- › Measures identified by Indigenous communities, the public and stakeholders through feedback received as part of the engagement and consultation program.

It is understood that mitigation measures may not always be fully effective, therefore, WFN will identify a compliance monitoring and effects monitoring program as part of the EA for implementation during the project phases (refer to Section 2.3.2.6).

Application of GBA+ to Identification of Mitigation Measures

Mitigation in the context of GBA+ asks the questions: how can we avoid or limit potential adverse impacts, and reduce the potential risks posed by the Project for vulnerable sub-groups? At the same time, how can we enhance the potential benefits for vulnerable sub-groups? Mitigation options will be proposed and explored in consultation with GBA+ socioeconomic study participants and through consultation and engagement activities. At a minimum, the TISG (Section 3.3) requires the following with respect to diversity and inclusion:

- › Plans to encourage the recruitment, development and retention of underrepresented groups in the Project (e.g., set targets for employment for specific groups);
- › Diversity and inclusion workforce development plans (e.g., youth with substance use programs);



- › Opportunities for diverse groups of women, and underrepresented groups, to be employed in higher-skilled jobs through provision of on-the-job training (e.g., surveyors, road safety auditors, and heavy equipment operators);
- › Workplace policies and programs, including codes of conduct, workplace safety programs and cultural training programs;
- › New or expanded social or emergency services, facilities or infrastructure.

2.4.2.3. Prediction of Net Effects

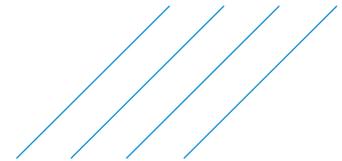
A net effect, or the alternative term residual effect, is considered an environmental (biophysical), social, economic or health effect from the Project and its related activities that is predicted to remain after the implementation of mitigation measures. A potential socio-economic effect is considered to occur where anticipated future conditions resulting from the Project differ from the conditions otherwise expected from natural change without the Project. In some situations, the recommended mitigation measures will eliminate a potential adverse effect, while in other situations mitigation measures may reduce, but not eliminate the effect. Mitigation measures may also enhance positive effects. A potential effect that will be eliminated, or considered unlikely after mitigation measures, will be identified as not resulting in a net effect (i.e., no net effect) and will not be considered further in the net effects assessment. An effect that may remain after the application of mitigation measures will be identified as a net effect and will be further considered in the effects assessment. Positive effects will also be considered further in the effects assessment, including means of enhancing benefits of the Project. Neutral changes will not be carried forward for the characterization of net effects, but where identified will be characterized in terms of the confidence in the predictions and the likelihood of the effect.

2.4.2.4. Characterizing the Net Effects

The characterization of net effects will provide the foundation for determining the significance of incremental and cumulative effects from the Project for each assessment criterion. The objective of the method is to identify and predict net adverse and positive effects that have sufficient magnitude, duration, and geographic extent to cause fundamental changes to the self-sustainability or function of a valued component, and therefore, result in significant combined effects.

The magnitude of the potential effect will be qualitatively and quantitatively assessed by inferring the anticipated changes relative to baseline conditions using the identified preliminary socio-economic criteria and indicators. In general, the magnitude is the intensity of the effect or a measure of the degree of change from existing conditions and will be defined by each discipline assessment. If a significant effect is identified, the contribution of the Project to the combined effect will be described. The assessment of significance of the net effects of the Project on the social and economic valued components will be informed by the interaction between significance factors (as defined below), in addition to those concerns raised by Indigenous groups, interested agencies, stakeholders, and the public during the consultation and engagement for the EA. Therefore, predicted net effects, where identified, will be described in terms of the following significance factors (MNRF, 2003), with integration of the assessment methodology identified in the federal TISG, as required.

- › **Direction** - The direction of change in effect relative to the current value, state or condition, described in terms of Positive, Neutral, or Negative.
- › **Magnitude** - The measure of the degree of change from existing (baseline) conditions predicted to occur in the criterion.



- › **Geographic Extent** - The spatial extent of which an effect is expected to occur/can be detected and described in terms of the PF, LSA and RSA.
- › **Severity** - The level of damage to the valued component from the effect that can reasonably be expected; typically measured as the degree of destruction or degradation within the spatial area of the PF, LSA and RSA. Severity would be characterized as: Extreme; Serious, Moderate or Slight.
- › **Duration/Reversibility** - Duration is the period of time over which the effect will be present between the start and end of an activity or stressor, plus the time required for the effect to be reversed. Duration and reversibility are functions of the length of time a valued component is exposed to activities. Reversibility is an indicator of the degree to which potential effects can be reversed and the valued component restored at a future predicted time. For effects that are permanent, the effect is deemed to be irreversible. Duration/Reversibility would be characterized for each adverse effect as: Short-Term (0- 5 years), Medium-Term (6-20 years), Long-Term (21 to 100 years) or Permanent (>100 years).
- › **Frequency** – Is the rate of occurrence of an effect over the duration of the Project, including any seasonal or annual considerations. Frequency would be characterized as: Infrequent; Frequent or Continuous.
- › **Probability or Likelihood of Occurrence** – Is a measure of the probability or likelihood an activity will result in an environmental effect. Probability or likelihood of occurrence would be characterized as: Unlikely, Possible; Probable and Certain.

The definitions and description of the above factors will be described in detail in the EAR/IS. An effort will be made to express expected changes quantitatively / numerically. For example, the magnitude (intensity) of the effect may be expressed in absolute (e.g., number of businesses affected) or percentage values above (or below) baseline conditions (e.g., changes to crime rates). Additionally, the definition of effect levels may vary from one valued component or criterion to another, recognizing that the units and range of measurement are distinct for each.

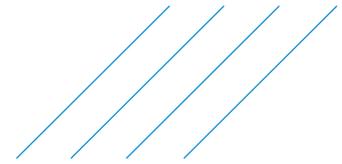
Application of GBA+ to Net Effects

Importantly, effects may impact communities, Indigenous groups and stakeholders in different ways, including through a GBA+ lens, and vulnerable sub-groups may respond differently to the effects. Therefore, determining and characterizing effects will be based largely on the level of concern expressed through engagement with the Indigenous groups and community members, including women, youth, and Elders.

2.4.2.5. Assessment of Significance

MNRF's Class Environmental Assessment for MNR Resource Stewardship and Facility Development Projects (MNRF, 2003) require the assessment of significance of environmental effects and provides guidance for assessing the significance of potential environmental effects under individual criteria, for a project as a whole, and for alternatives.

In addition to the Class EA guidance, the determination of significance of net effects and cumulative effects from the Project and other previous, existing, and reasonably foreseeable developments will generally follow the guidelines and principles of the *Draft Technical Guidance Determining Whether a Designated Project is Likely to Cause Significant Adverse Environmental Effects under the Canadian Environmental Assessment Act* (CEA Agency, 2017) and the *Operational Policy Statement: Determining*



Whether a Designated Project is Likely to Cause Significant Adverse Environmental Effects under the Canadian Environmental Assessment Act, 2012 (CEA Agency 2015).

In general, the assessment of significance of net effects will be applied to each valued component for which net effects are predicted, and net adverse effects or positive effects will be classified as significant or not significant (i.e., binary response). Given that determinations of significance are highly sensitive to context and shaped by human values and cultures (Baker and Rapaport 2005; Kjellerup 1999), efforts will be made to collaborate with Indigenous communities, particularly the 4 communities potentially most impacted socially and economically, as well as vulnerable sub-groups, in defining and assigning significance classifications to particular valued socio-economic components.

Additional details on the application of socio-economic criteria and definitions that would describe “significant” and “not significant” will be provided in the EAR/IS.

2.4.2.6. Identification of a Monitoring Framework

Webequie First Nation will develop a monitoring framework during the EA process for each project phase (construction and operation and maintenance). The two primary types of monitoring to be developed will include:

- › Compliance monitoring; and
- › Effects monitoring.

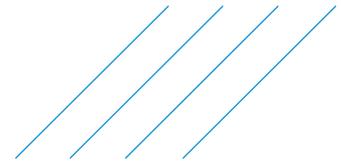
The compliance monitoring will assess and evaluate whether the Project has been constructed, implemented and/or operated in accordance with commitments made during the EA process, and any conditions of the federal IA and provincial EA approvals and other approvals required to implement the Project.

The effects monitoring will be designed to verify the prediction of the effects assessment, and to verify the effectiveness of the mitigation measures. This would include construction and operational monitoring that would identify actual effects, assess the effectiveness of the measures to minimize or eliminate adverse effects, and evaluate the need for any additional action to ensure that socio-economic commitments and obligations are fulfilled, and mitigation measures are effective. It is expected that the monitoring program will involve Indigenous participation in the design and implementation of the program.

2.5. Schedule and Reporting

The schedule for completion of the socio-economic baseline report is as follows:

- › Desktop research – April 2021 to March 2022 (as remaining community documents become available);
- › Social Surveys – July 2021 to May 2022;
- › Focus Groups – January 2022 to May 2022;
- › Key informant interviews– September 2021 to May 2022;
- › Draft Baseline Report (including all primary information)– July 2022;
- › Draft EAR/IS – May 2023;
- › Consultation and engagement activities to confirm baseline information collected, discuss potential impacts and identification of mitigations – Ongoing.



The baseline socio-economic primary information and data will be collected from summer 2021-spring 2022 and will be compiled into a Socio-Economic Existing Conditions Report that will include results and findings from the primary data collection activities (surveys, key focus groups, informant interviews, consultation and engagement activities) and desktop research. The overall baseline report is tentatively scheduled to be completed by July 2022 and Indigenous communities will be requested to validate the baseline information in the report as part of the process to finalize the document.

3. Aboriginal and Treaty Rights

The Webequie Project Team will engage with Indigenous communities regarding potential impacts of the project on the exercise of asserted or established rights, and where possible, the Project's interference with the exercise of those rights. Webequie First Nation and the Project Team will discuss with Indigenous communities their views on how best to reflect and capture impacts on the exercise of asserted and/or established rights in the EAR/IS. Should impacts on the exercise of Aboriginal and Treaty rights be identified, Webequie First Nation and the Project Team will work with Indigenous communities to determine appropriate mitigation measures to reduce or eliminate such impacts. Where no mitigation measures are proposed or mitigation is not possible, the Project Team will identify the adverse impacts or interference to the exercise of Aboriginal and Treaty rights and this will be described (e.g., level of severity) and documented in the EAR/IS. Webequie First Nation and the Project Team will advise Ontario and the Government of Canada on concerns Indigenous communities may have in relation to their exercise of Aboriginal and Treaty rights and whether their concerns cannot be addressed or mitigated by the Project Team.

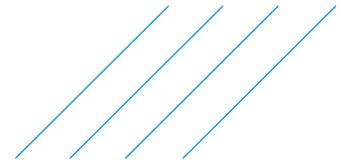
4. Contribution to Sustainability

4.1. Overarching Approach

As recognized in the Agency's current guides to considering how a project will contribute to sustainability, it is not until baseline information has been collected and the potential effects of the Project are assessed that a full understanding or determination of the project's contribution(s) can be achieved/made. However, information and data requirements for sustainability have been considered from the outset of the WSR Project for planning purposes. In the absence of the potential effects assessment, this section outlines the general approach to determining sustainability contributions for the socio-economic valued component.

The approach is based on the goal of providing a broad or holistic description of the project's potential positive and negative effects, including the interactions among those effects and the long-term consequences of the effects. In the context of the IAA requirements, sustainability means "the ability to protect the environment, contribute to the social and economic well-being of the people of Canada and preserve their health in a manner that benefits present and future generations", with the aim of "protecting the components of the environment and the health, social and economic conditions that are within the legislative authority of Parliament from adverse effects caused by a designated project", recognizing that the Minister's or the Governor in Council's public interest determination must include sustainability as one of five factors to be considered in rendering a final decision.

The approach also considers the level of effort required to assess a project's contribution to sustainability to be scalable, depending on the phase of the process and the context of the project, and can/will be



adjusted/scoped as the impact assessment proceeds. For example, effects on future generations requires temporal scoping (i.e., consideration of next generation to “seventh generation”), based on expectations as to how many generations it will take for effects to become fully apparent, including return to VC baseline conditions; resilience of the VC; and whether a VC is expected to recover from effects.

As part of the public participation and Indigenous peoples engagement programs described in Sections 3.1 and 3.2, the Project Team has (and will continue to) facilitate early identification of values and issues to better inform the assessment of the project’s contribution to sustainability; and identify VCs that should be carried forward into that assessment, scoping related criteria and indicators to reflect the project context. As part of sustainability considerations, this information has also been used (with regard to which VCs are considered most important to Webequie First Nation) to identify alternative means of carrying out the Project and select alternatives to be carried forward for an assessment of sustainability contributions. Ultimately, with the appropriate input from the engagement and consultation program, the sustainability assessment will culminate with the development of commitments to ensuring the sustainability of Indigenous livelihood, traditional use, culture and well-being.

In identifying and scoping key VCs for sustainability contributions, the Project Team will consider VCs that:

- › could experience long-term effects, including how those effects could change over time, and how they could affect future generations;
- › may interact with other VCs;
- › may interact with potential effects of the designated project; and/or
- › may interact with project activities.

4.2. Assessment of Contribution to Sustainability

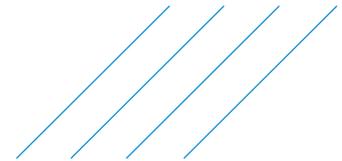
During preparation of the Impact Statement, the four (4) Sustainability Principles identified in the Agency’s guides and the TISG will be applied as follows:

Principle 1 - Consider the interconnectedness and interdependence of human-ecological systems

A systems approach will be used to determine/express VC interconnectedness. The degree of interconnectedness within systems and/or subsystems may vary greatly (may be characterized as very intricate and tight/direct, or quite loose and indirect). The focus will be on those aspects that are most important to communities, the social-ecological system and to the context of a project. All interactions, pathways and connections among effects to the environment, and to health, economic and social conditions will be described, as will how these interactions may change over time. The Project Team will ensure that the description of systems and the direct and indirect relationships are guided by input from Indigenous Knowledge. It is expected that a graphic with simple pictorial images will be developed to visually represent the connections between human and ecological systems to facilitate comprehension and encourage input/feedback.

Principle 2 - Consider the well-being of present and future generations

The long-term effects on the well-being of present and future generations will be assessed. To conduct an analysis on future generations, the Project Team will first determine the potential long-term effects on well-being. This will entail consideration of the elements of environmental, health, social and economic well-being, across a spectrum of VCs, that communities identified as being valuable to them. In the context of the socio-economic VC, well-being could include community cohesion, protection of the environment, culture, stress, or livelihoods. Available Comprehensive Community Plans (CCP) will be



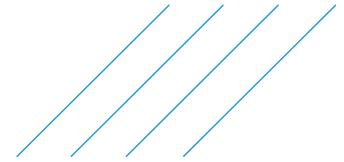
consulted to determine whether sustainability is a CCP central theme. How the environmental, health, social and economic effects on well-being could change over time will also be assessed, as information permits. Although effects on future generations could include effects beyond the lifecycle of a project, this is not expected to be a major consideration for the WSR Project, as no expected decommissioning or abandonment timeframe has been identified. With respect to temporal scoping, there is still a need to determine what the “future generation” is (i.e., how far into the future the project effects will be considered). Predicted potential effects on future generations will be assessed based on the supporting data or uncertainty; any uncertainty will be documented.

Principle 3 - Maximize overall positive benefits and minimize adverse effects of the designated project

The Impact Statement will include a consideration of ways to maximize the positive benefits of the Project and consider mitigation measures that are technically and economically feasible and would mitigate any adverse effects of the Project. Sustainability considerations will include: whether additional mitigation measures are required; have additional benefits been identified and, if so, how can they be maximized; does the direction of the impact (i.e., positive or negative) shift between different groups and sub-populations; are there particular strengths or vulnerabilities in the potentially affected communities that may influence impacts; do the impacts cause regional inequities; and do the near term benefits come at the expense of disadvantages for future generations.

Principle 4 - Apply the precautionary principle and consider uncertainty and risk of irreversible harm

The precautionary principle states that “where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation”. All uncertainties and assumptions underpinning an analysis will be described. A precautionary approach will be applied in cases where there is risk of irreversible harm (irreversible harm refers to project-related effects from which a VC is not expected to recover; reversibility is influenced by the resilience of the VC). Taking such a conservative approach may include setting out worst-case scenarios for decision-makers to consider, particularly when there is uncertainty about the significance or irreversibility of potential effects. As appropriate, the precautionary approach may be extended to commitments regarding the project’s design (to prevent adverse effects, prevent pollution, deal with unplanned events) and the development of monitoring and follow-up programs to verify effects predictions, or gauge the effectiveness of mitigation measures. Uncertainty may be characterized quantitatively (e.g., description of confidence levels of modelled predictions) or qualitatively (e.g., through descriptors such as “high”, “medium”, and “low”). Qualitative descriptions of uncertainty will explain how the level of uncertainty was determined, identify sources of uncertainty and data gaps, and describe where and how professional judgment was used.



5. Closure

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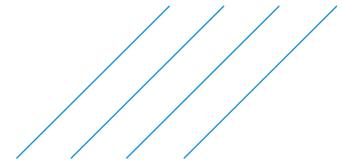
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