List of Appendices

APPENDIX A

Excerpts from the Ministry Review of the New Transmission Line to Pickle Lake Environmental Assessment (August 2018)

Comment ID	Comments
Commenter: Mishkeegogamang First Nation **Source: Wataynikaneyap Power Environmental Assessment Report for the Phase 1 New Transmission Line to Pickle Lake Project: Indigenous Community or Group Comments (August 2018), Table 4**	
MISH-05	By opening up a separate geographic area, it would absolutely result in excessive hunting and poaching by non-community members. This is an issue because men, women, children and elders rely on hunting to put food on the table. If these areas are now opened up for anyone to hunt, it would reduce the ability of the community to hunt and put nutritional food on the table. Also it would be impossible to police that vast area by the OPP and/or MNR conservation officers
MISH-07	Another major concern identified by our membership if Watay's preferred route proceeds, especially because of the need for over 80km of new access roads/trails as discussed above, would be the troubling if not decimating impacts on our Caribou. You need to know that what the Watay EA Consultants have concluded regarding Caribou is not accurate. It is the view of our Elders and those who continue to live off the land, that a transmission line and parallel access road would entirely upset the balance of nature within that area, including within the Far North area. That is where there is significant Caribou habitat…Although it is accurate to say that there are very few of our members who presently hunt Caribou, regardless, the Caribou are there for a significant purpose, both to provide the balance in nature and to perpetuate its spiritual importance to our people. We therefore fully support the independent findings of the study by the Wildlands League, which convincingly concludes the Caribou would be decimated if there was a new access corridor constructed from Dinorwic to Pickle Lake. It would appear that Watay's EA consultants have determined this study has no significance. We respectfully disagree.
Commenter: Ojibway Nation of Saugeen **Source: Wataynikaneyap Power Environmental Assessment Report for the Phase 1 New Transmission Line to Pickle Lake Project: Indigenous Community or Group Comments (August 2018), Table 6**	
SAUG-06	…In contrast, an access road from Dinorwic to Pickle Lake would provide new access to previously inaccessible lakes, rivers and habitat, which would attract countless poachers, tourists and others who want to access our traditional lands for their own interests. We can't understand why serious consideration would be given to a new corridor of approximately 340 kilometers, which would obviously increase disturbance, when there is already a corridor in existence, and where as a result, even a new access road adjacent to Highway 599 would cause minimal disturbance.
SAUG-08	We also remain extremely disturbed that Watay EA consultants have not taken seriously the adverse impacts to our Caribou that roam through our territory along the proposed Dinorwic alignment. It is very unusual that Caribou are found along Highway 599, but it is common knowledge amongst our people that the Caribou's habitat is situated in the precise location where Watay's proposed transmission line and access road are to be located.

	Caribou are a Species at Risk and our Caribou continue to have enormous spiritual significance to our people and to our ecosystem. It would be tragic to proceed with the Dinorwic routing knowing full well there has been the recent study by the Wildlands League that cautions against such an initiative.
Commenter: Ministry of Natural Resources and Forestry **Source: Environmental Assessment Report for the Phase 1 New Transmission Line to Pickle Lake Project Government Review Team (GRT) Comments on the Final EA Report August 2018), Table 11**	
MNRF-COV-11	**Consultation** The EA does not demonstrate that there has been adequate Aboriginal consultation to support MNRF permitting and authorizations as it does not fully address the details of the project components. It is possible that Aboriginal values and rights could be impacted by the project components that are not fully discussed within the EA…It is unclear whether the concerns identified and brought forward by Mishkeegogamang have been considered, addressed or responded to within the EA. Furthermore, the EA needs to better reflect consultation and coordination with other land users. More information is needed to demonstrate how impacts to and feedback from the forest industry, aggregate operators and other stakeholders are considered. Additional information is needed with regard to how activities will be coordinated with forest industry to minimize project impacts.
MNRF comment 49551	Nowhere in the EA and its conclusions is it apparent to the reader what the real implications of the proposed transmission corridors will be for caribou. Focusing the impacts assessment on the right of way (ROW) and then teased apart into habitat category type, seasonality, ranges, collars etc. confuses the reader and diverts attention away from documenting the sum impact of the project on woodland caribou.
MNRF-COV-01	**Data, Analysis and Conclusions** In MNRF's opinion the Final EA does not contain sufficient information to confirm that MNRF's specific jurisdictional mandate, legislative requirements or interests have been adequately identified. The information in the Final EA does not address areas of MNRF mandate at the appropriate level of detail. The EA remains too high level and found to contain discrepancies, thus impacting conclusions.
49440	…Woodland caribou are already demonstrating avoidance of Hwy 599. It is more acceptable to construct a new permanent linear disturbance that parallels an existing permanent linear disturbance (Hwy 599) that is already acting as a barrier from an ecological integrity perspective. The risk to woodland caribou is low because Hwy 599 is already acting as a barrier. The construction of a new permanent linear disturbance adjacent to a permanent linear disturbance that is not acting as barrier is potentially a high risk for woodland caribou. This may cause or create a barrier to woodland caribou that did not exist previously and will impact ecological integrity.
49434	…OMNRF, Obishikokaang Resources Corporation and Resolute Forest products met with representatives from Wataynikaneyap in October 2017 at the request

	of MNRF due to the suggested deficiencies in the Sustainable Forest License Holder consultations. Obishikokaang Resources Corporation and Resolute Forest Products requested information about the caribou disturbance (buffered effect) within each range and Forest Management Unit because this has an impact on wood supply levels. MNRF…requested this information as well. The final EA does not contain this information for the proposed routes.

APPENDIX B

Anna Baggio

From: O'Neill, Nancy <Nancy.ONeill@dnvgl.com>
Sent: February 27, 2018 2:33 PM
To: Anna Baggio
Subject: RE: Technical Meeting with Watay Power

Good afternoon Anna, apologies for the late reply to the meeting request. At the moment our technical team is very busy, I was not able to coordinate a meeting last week.

We have received your submission through the MOECC, we are preparing responses to your comments and will submit directly to the MOECC as per process requirements.

Kind regards,

Nancy O'Neill

Environmental Assessment Lead

FortisOntario Inc.

Thunder Bay, ON
Cell: (905) 630-1712
Email: Nancy.oneill@dnvgl.com

From: Anna Baggio [mailto:anna@wildlandsleague.org]
Sent: February-15-18 10:46 AM
To: O'Neill, Nancy <Nancy.ONeill@dnvgl.com>
Subject: RE: Technical Meeting with Watay Power

Hi Nancy, we can try to squeeze in a meeting that week. I have limited availability that week but please send me some dates and times and we'll check our schedules are get back to you. Otherwise we are looking at post march 13.

Cheers
Anna

From: O'Neill, Nancy [mailto:Nancy.ONeill@dnvgl.com]
Sent: February 15, 2018 9:31 AM
To: Anna Baggio <anna@wildlandsleague.org>
Subject: RE: Technical Meeting with Watay Power

Toronto won't be an issue but given the extent of the comments received next week will be to soon to have our technical team prepare response to the comments. It is more likely to happen the following week, does that work for you?

APPENDIX C

Ontario

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Ministry of
Natural Resources and Forestry

Ministère des
Richesses naturelles et des Forêts

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April 14, 2016

Dear Mr. Eade,

Thank you for the opportunity to review the Proposed Effects Assessment Approach for Woodland Caribou for the Wataynikaneyap Power Phase 1 Environmental Assessment. We recognize that discussion between the Ministry of Natural Resources and Forestry (MNRF) and Wataynikaneyap regarding the assessment of potential impacts to caribou and caribou habitat associated with the project have been ongoing for a number of years and look forward to continuing to work with you on this project.

Based on our continued discussions and current understanding of the project, we have assembled a recommended approach to assist you in developing a fulsome assessment and documentation of impacts to caribou and caribou habitat as part of your environmental assessment (EA).

MNRF recognizes the importance of enabling electricity transmission to remote communities and looks forward to continuing to work with Wataynikaneyap Power on this project in the future. Should you wish to discuss the approach laid out below, please contact Gillianne Marshall (gillianne.marshall@ontario.ca or 807-475-1122) who will be able to facilitate further discussions between MNRF and Wataynikaneyap.

Sincerely,

John Sills
Regional Resources Manager
Ministry of Natural Resources and Forestry, Northwest Region

1.0 Ontario's Framework for Caribou Conservation; Available Information and Data Sources

1.1 Legislative Basis for the Protection of Caribou

Ontario's *Endangered Species Act, 2007* (ESA) identifies and provides protection to species at risk (SAR). Woodland Caribou (*Rangifer tarandus caribou*) (Forest-dwelling boreal population), is listed as a threatened species on the Species at Risk in Ontario (SARO) List (O.Reg 230/08 under the Endangered Species Act). As a threatened species, caribou receive both species protection under Section 9 and general habitat protection under Section 10 of the ESA.

In Ontario, the majority of caribou are broadly distributed across the boreal forest, with the exception of animals occupying the Lake Superior shoreline and a number of adjacent islands. The continuous distribution of caribou within Ontario is divided into a number of ranges. Ranges serve as the ecological and spatial basis for evaluating caribou population and habitat states, and managing cumulative effects at the landscape scale. Caribou depend directly and indirectly on the entire range as habitat.

All proposed activities occurring in the continuous and discontinuous distribution of caribou must undergo an assessment to determine if the activity is likely to kill, harm or harass caribou or damage or destroy caribou habitat.

1.2 Policy Framework for Caribou

Ontario's Woodland Caribou Conservation Plan (CCP), which is the province's Government Response Statement for this species, outlines the government's goal for the recovery of caribou, provides broad policy direction and identifies actions the Ontario government intends to take to conserve and recover caribou in Ontario.

Ontario's caribou conservation goal, as stated in the CCP, is "*to maintain self-sustaining, genetically-connected local populations of Woodland Caribou (forest dwelling boreal population) where they currently exist, improve security and connections among isolated mainland local population, and facilitate the return of caribou to strategic areas near their current extent of occurrence".*

The Caribou Conservation Plan identifies "local population ranges" as the appropriate biological scale at which to plan and make resource management decisions consistent with caribou conservation, and prescribes adoption of a Range Management Approach as the primary method that sets the spatial and ecological context for planning and management decisions within an adaptive management framework.

The **Range Management Policy in Support of Woodland Caribou Conservation and Recovery** (Range Management Policy or RMP) provides direction to conserve and recover caribou in Ontario through the development and implementation of a Range Management Approach. The objective of the Range Management Policy is "*to maintain*

or move towards a sufficient range condition in all caribou ranges in Ontario". The Range Management Policy has three principles:

- Principle 1 – Cumulative Disturbance: Ranges will be managed such that the amount of cumulative disturbance remain or moves towards a level that supports a self-sustaining caribou population.
- Principle 2 – Habitat amount and arrangement: The amount and arrangement of habitat within a range will be managed consistent with the level that has been estimated to occur in natural landscapes.
- Principle 3 – Sub-range habitat features: Within a range, forest composition, pattern and structure will be managed to promote the maintenance of the ecological function of sub-range habitat features for caribou in the context of range condition.

Section 6.3 of the Range Management Policy provides direction on integrating range condition into activity review and assessment in the context of species and habitat protection under the ESA, which informs planning and decision-making.

The **Delineation of Woodland Caribou Range in Ontario** documents the delineation of 14 ranges within Continuous Distribution, and the delineation of the Discontinuous Distribution in Ontario. It includes detailed descriptions of the specific range boundaries.

The **Integrated Assessment Protocol for Woodland Caribou Ranges in Ontario** describes the process for conducting an Integrated Range Assessment and the preparation of an Integrated Range Assessment Report.

An **Integrated Range Assessment Report** (IRAR) has been completed for each of the seven southern caribou ranges in the continuous distribution (with the exception of the Lake Superior Coast Range) and one report for the six ranges in the Far North of Ontario. These reports document the data, analyses, interpretation and results from each of the Integrated Range Assessments, and document range condition for each range. In addition to range condition, IRARs contain important historical, contextual and ecological knowledge relevant to the management of the range, as well as what has influenced caribou population size and distribution on the range.

The **General Habitat Description for the Forest-dwelling Woodland Caribou (*Rangifer tarandus caribou*)** (GHD) is a technical document that provides greater clarity on the area of habitat protected for caribou based on the general habitat definition found in the *Endangered Species Act, 2007*. The GHD describes the entire range as habitat and categorizes the range into sub-range habitat features including high use areas, seasonal ranges and remaining areas within the range, as per the policy *Categorizing and Protecting Habitat under the Endangered Species Act*. Habitat categorization provides a framework for identifying which areas of habitat a species may be able to tolerate more or less changes to as outlined in the policy Categorizing and Protecting Habitat under the ESA.

The **Best Management Practices for Woodland Caribou in Ontario Series** describes techniques, methods, or processes that can be applied to avoid or mitigate adverse effects, and reduce threats to caribou when planning or undertaking activities within a range, and contribute to achieving the objective of the Range Management Policy. (Note – reference can be made to specific BMP documents that relate to the project (e.g. renewable energy and transmission lines).

1.3 Land Use Direction

Existing land use plans and area specific Crown land use policies may include approved direction related to provision of caribou habitat that should be considered during the EA. Within the Far North, draft and approved Community Based Land Use Plans (CBLUPs) may have incorporated information and direction related to caribou, especially when considering delineation of dedicated protected areas (DPAs).

1.4 Resource Management Direction

Forest management plans (FMP) contain both strategic direction (e.g. Dynamic Caribou Habitat Schedules) and operational direction (e.g. Road Use Management Strategies) pertaining to the management of caribou habitat on the landscape over time.

The Cervid Ecological Framework (CEF) provides overarching policy advice to address cervid (including caribou, moose and deer) management at the broad landscape level in Ontario.

Management direction for Provincial Parks and/or Conservation Reserves may contain direction related to management of caribou habitat.

1.5 Information Sources

The **Woodland Caribou (*Rangifer tarandus caribou*) in the Far North of Ontario: Background Information in Support of Land Use Planning** reports the findings of a multi-year study on the distribution, movement, population dynamics and habitat use patterns of forest-dwelling and forest-tundra caribou in the Far North of Ontario.

MNRF has collected caribou data to support population, range, and habitat monitoring; management planning, landscape evaluation and modeling; and policy and legislative development, and to complete Integrated Range Assessments and determine range condition. This caribou data is accessible through LIO with the appropriate data sharing agreements. Mapping data for some types of anthropogenic and natural disturbance are also available through LIO. The following layers contain caribou data and data layers useful in defining caribou habitat should be accessed and considered when developing the environmental assessment:

- Species Search Area data
- Species Monitored Subject Tracking Point data
- Species Observation, Provincially Tracked data
- Species Occurrence, Locally Derived data (including caribou Nursery Areas, Winter Use Areas and Travel Corridors)

Range boundaries have been delineated and are publically available through Land Information Ontario (LIO) as well.

The **Integrated Range Assessment Protocol for Caribou Conservation in Ontario Appendix A: Habitat State across Woodland Caribou Ranges in Ontario – Mapping Process Documentation** provides a detailed list of the data (including source) and methods used to map anthropogenic and natural disturbances and caribou habitat (e.g., refuge habitat, winter habitat) as they relate to the Federal and Provincial science used in the Integrated Range Assessments.

A Resource Selection Probability Function (RSPF) has been prepared by MNRF to identify predicted high and low-use areas for caribou. The results can be made available to proponents upon request to MNRF. The citation for this work is:.

> Hornseth M.L. and Rempel R.S. 2015. Seasonal resource selection of woodland caribou (*Rangifer tarandus caribou*) across a gradient of anthropogenic disturbance. Canadian Journal of Zoology.

Occupancy models have been published for moose, caribou and wolves. These show the probability of occupancy of these species across the Far North. The citation for the occupancy models is:

> Poley, L.G., B.A. Pond, J.A. Schaefer, G.S. Brown, J.C. Ray and D.S. Johnson. 2014. Occupancy patterns of large mammals in the Far North of Ontario under imperfect detection and spatial autocorrelation. Journal of Biogeography 41:122-132.

MNRF has developed a draft standard methodology for mapping sub-range habitat features for caribou (Category 1, 2, and 3) as described in the GHD. To ensure consistency in application of mapping standards across the province, MNRF will produce general habitat mapping for caribou upon request from proponents. In order to perform this mapping, MNRF will require up-to-date shapefiles of the project area where the activity and alternatives are proposed, as well as shapefiles of the study area(s) used by the proponent when conducting their Environmental Assessment. The project area should include all associated infrastructure that will remove forest cover or have the potential to cause sensory disturbance to caribou. The proponent is responsible for the interpretation of how their project will impact caribou habitat. Under the ESA, MNRF will determine if caribou habitat is likely to be damaged or destroyed or if caribou are likely to be killed, harmed, or harassed as a result of the project.

Ontario's Caribou Screening Tool (CST) is a decision-support tool to track ongoing cumulative disturbance on caribou ranges within the southern continuous ranges. CST is currently not applicable in the Far North caribou ranges and the discontinuous and coastal ranges. The CST reports on how an activity affects cumulative disturbance and habitat amounts as compared to the Simulated Range of Natural Variation (SRNV) and describes the activity location relative to caribou values (e.g., Nursery Areas, Winter Observations, etc.). MNRF will request proponents provide up-to-date shapefiles of their preferred and alternative locations of the project/activity to be used as an input to

CST. MNRF will provide CST reports to proponents for use while conducting their environmental assessment. CST outputs are not considered a decision tool, but rather are required as part of the complete documentation submitted for the assessment of impacts to caribou.

Existing resource management plans and land use plans may include approved direction related to provision of caribou habitat that should be considered during the EA.

- FMPs can be accessed at: http://www.efmp.lrc.gov.on.ca/eFMP/home.do?currentFmu=&language=en
- The Cervid Ecological Framework is available online: https://www.ontario.ca/document/cervid-ecological-framework
- Area specific Crown land use policies can be found in the Crown Land Use Policy Atlas, accessible at: https://www.ontario.ca/page/crown-land-use-policy-atlas
- Provincial Park and Conservation Reserve direction can be accessed here: https://www.ontario.ca/page/provincial-parks-and-conservation-reserves-planning
- Far North CBLUPs can be accessed here: https://www.ontario.ca/page/land-use-planning-process-far-north#section-2

2.0 Caribou Assessment and Impact Analysis

MNRF has prepared the following summary of the expected caribou assessment and impact analysis which should be included in the required chapters of an individual environmental assessment.

2.1 Description of the Environment

In the Description of the Environment, the EA should:

- Identify all caribou ranges potentially affected by the project proposal. Where activities are planned near range boundaries, these ranges should be identified. The EA should include a map showing where the project will occur relative to range boundaries, as well as a description of the size of the range(s) (in hectares). The location of the range(s) within the province should be provided, as well as a description of where the range(s) is relative to other ranges, along with a description of the boundaries of the range(s) and the location of where the project is located within the range(s) (e.g. north vs. south, crossing the range, near other range boundaries).
- Include a discussion of the range condition for all ranges where the potential activity will occur (as summarized in the IRARs). Range condition informs the relative tolerance of the range to alteration and the determination of the risks a particular activity would pose for caribou. Range condition also informs the relative significance of sub-range habitat features.

- A description of the sub-range habitat features for each potentially affected range should be presented, including mapping of location of individual features relative to the proposal. This information can be found in LIO, the IRARs, GHD mapping and through discussion with MNRF staff. Discussion of the amount, location, significance and known past and current use of Category 1 habitat (nursery areas, winter use areas and/or travel corridors), Category 2 habitat (Seasonal Ranges), and Category 3 habitat (remaining areas of the range) on each range should be included. The description should highlight sub-range habitat features that are important to the range overall.
- Have a summary of important historical, contextual, ecological and Aboriginal traditional knowledge relevant to the management of the range(s), as well as what has influenced caribou population size and distribution on the range. This information can be found in IRARs, CST Reports and from input from MNRF staff. This summary should include:
    - Location of forest management units on the range and description of past harvest, planned harvest, planned regeneration, and road use strategies to support caribou habitat management;
    - Existing disturbance, both anthropogenic and natural, including but not limited to communities, transportation and other linear corridors, resource development, blowdown areas, insect damage, and areas burned by past forest fires;
    - Forest fire history and fire return interval;
    - Disturbance amount and pattern on the landscape and the drivers;
    - Habitat Amount and Arrangement on the landscape;
    - Historical caribou occupancy and surveys, recruitment, population trend;
    - Areas of known caribou use;
    - Geographic/ecological description of range (e.g. description of ecology, forest composition and structure, soils, landforms, waterbodies, etc.).
    - Historical caribou occupancy and surveys, minimum animal count, recruitment rates, population trend, known patterns of use and effects of past and current disturbance on caribou populations on range.
- Have a description of caribou occupancy and habitat use in the project area, and at the range level using information found in LIO and the IRARs. This would typically include summary of known caribou occurrences in the project area, when and where individuals were observed, number of observations, age and sex information (if available). A map of caribou observations relative to the project should be included.

A summary of approved land use direction applicable to the project area should be presented. This should include CBLUPs, area specific policies found in CLUPA, and protected areas (provincial parks and conservation reserves) management direction. Proponents should:

- Describe any content, policy and land use intent of CLUPA policy reports or Local Planning Documents, as related to caribou habitat management, as well as permitted/prohibited uses relative to the project.
- Describe any content, policy and land use intent found in Far North CBLUPs related to caribou habitat, as well as permitted and excluded uses.
- Describe any content and policy contained in protected area management direction, related to caribou habitat management and permitted/excluded uses.

Proponents should describe how the landscape is being managed to provide caribou habitat in the future. A summary of approved resource management direction applicable to the project area should be presented, including forest management planning and planning for cervids. The proponent should list the relevant forest management units (FMUs) and cervid ecological zones (CEZs) which overlap the project area.

With respect to forest management planning, the proponent should summarize any information and management direction in the FMP Long-term Management Direction (LTMD) and Operational Strategies related to caribou, including the purpose of strategic locations of various blocks to provide caribou habitat over time, the location of any identified Areas of Concern (AOCs) for caribou, and the planned harvest schedule. The proponent should describe any caribou habitat values identified in the DCHS/FMP in the project area. Any objectives, indicators, desirable and target levels that are either directly or indirectly related to caribou such as the provision of caribou habitat (direct) or a reduction in linear features (indirect) should be discussed, as well as any approved management strategies for caribou and applicable road use management strategies. The Dynamic Caribou Habitat Schedule (DCHS) for the Forest Management Unit (FMU) should be described, including current and planned future availability and arrangement of DCHS blocks. The EA should also include a map overlaying the proposal on the planned DCHS blocks. Existing and planned forest access roads along with those planned for decommissioning and regeneration on the landscape should also be described.

The proponent should also describe the Cervid Ecological Zone(s) (CEZ) in which the project is proposed to occur, including a discussion of guidance and objectives for caribou population and habitat as well as guidance and objectives for moose/deer population and habitat.

2.2 Description of and Rationale for Alternatives

The *Environmental Assessment Act* requires that proponents consider a reasonable range of alternatives, including examining "alternatives to" the undertaking and

"alternative methods" of conducting the undertaking. "Alternatives to" the undertaking are functionally different ways of approaching and dealing with the defined problem or opportunity, whereas "alternative methods" of carrying out the proposed undertaking are different ways of doing the same activity (e.g. consideration of different routing for linear features).

For the Wataynikaneyap Phase 1 project, the Terms of References identifies that "alternatives to" the project will not be considered through the EA, given the identification of electricity transmission expansion to Pickle Lake as a priority in *Ontario's Long-term Energy Plan (2013)*. Alternative methods to carry out the undertaking will be considered during the EA, through the assessment of 3 different corridor routing options.

The identification of and rationale for alternative methods of carrying out the project should consider caribou and its habitat. Where alternative methods affect different caribou ranges, the range condition will be used as a criterion in the comparative assessment of those methods.

In the identification of alternative methods, the EA should document consideration of methods including an assessment of potential impacts to caribou and its habitat and identify methods that can avoid or minimize potential impacts to caribou and all categories of protected habitat to the extent possible.

In the identification of alternative methods, consideration should be given with appropriate documentation, to methods that may align with other planned, approved or existing disturbances in order to minimize the overall disturbance footprint on the caribou range.

GHD mapping can be used to conduct "constraint mapping" to identify alternatives to or alternative methods to help avoid and/or minimize potential impacts to caribou habitat.

Through the identification and documentation of alternative methods in the EA document, it is recommended that the proponent also strive to clearly demonstrate that *reasonable alternatives* as per the ESA have been considered and fully evaluated including an avoidance alternative that would not adversely affect caribou or its habitat (see the Endangered Species Act Submission Standards for Review and 17(2)(c) Overall Benefit Permits and the Avoidance Alternatives Guide under the ESA for additional information).

2.3 Assessment and Evaluation of Alternatives

The following criteria and indicators are recommended for inclusion in the EA to address MNRF's legislative and policy framework with respect to caribou and its habitat. They will be considered in MNRF's review of the EA and may be required for any subsequent permits and/or authorizations. Criteria and indicators must be applied consistently for the preferred option and all alternatives. The following table is a summary of criteria and

indicators that should be applied for the project, recognizing that the relative importance and weighting of each will vary and should be considered in the context of the project. A detailed discussion of information sources, discussion and analysis required, and rationale for inclusion of the criteria and indicators follows below.

Criteria	Indicators
Caribou Habitat	Range Condition
	Cumulative Disturbance at Range Level
	Alignment with Existing or Proposed Disturbance
	Habitat Amount and Arrangement
	Category 1: High Use Area - Nursery Area Habitat directly impacted
	Category 1: High Use Area - Winter Use Areas directly impacted
	Category 1: High Use Area - Travel Corridors directly impacted
	Category 2 Habitat: Seasonal Ranges directly impacted by proposal
	Category 2 Habitat: Seasonal Ranges impacted by proposal
	Category 3 Habitat (Remaining Areas in the Range) impacted by proposal
	Number of Category 1 Habitat (Nursery Areas, Winter Use Areas, Travel Corridors) found within 10 km of the proposal
Caribou (Species Protection)	Incidental mortality due to anthropogenic impacts (e.g. vehicular collisions, increased hunting pressure)
	Indirect mortality due to increased alternate prey sources (moose and deer) leading to increased predation (wolves, bears, etc.) and increased potential for

	spread of disease (e.g. brainworm).
	Indirect impacts due to sensory disturbance (e.g. light, sound, vibrations, olfactory)
Consistency with Existing Resource Management Direction	Consistency with approved Forest Management Plans
	Consistency with Cervid Ecological Framework
	Consistency with protected areas management direction
Consistency with existing Land Use Direction	Consistency with area-specific Crown Land Use Policies
	Consistency with Far North Community Based Land Use Plans

2.3.1 Criteria and Indicators for Caribou Habitat

Criteria: Caribou Habitat
Indicator: Range Condition
Information Source(s): Integrated Range Assessment Reports
Rationale for Inclusion: Caribou rely directly and indirectly on the entire range to carry out their life processes. Range condition informs the relative tolerance of the range to alteration and the determination of the risk a particular activity would pose for caribou and informs the relative significance of sub-range habitat features. Generally, where range condition is sufficient, there will be increased tolerance to alteration in all three habitat categories and an increased likelihood that alteration may occur while complying with the ESA. MNRF considers range condition during activity review and assessment and decision-making in caribou continuous distribution.
Discussion/Analysis: Qualitative assessment describing why an activity is proposed to occur in a given range where the condition may not be sufficient to sustain caribou or may be uncertain to sustain caribou. Where feasible, consideration should be given to conducting activities in caribou ranges which are sufficient to sustain caribou. If it is not feasible to conduct the activity in a range sufficient to sustain caribou, the proponent should provide rationale as to why this type of alternative cannot occur.

Criteria: Caribou Habitat
Indicator: Cumulative Disturbance at Range Level

Information Source(s): Ontario's Caribou Screening Tool, Integrated Range Assessment Reports
Rationale for Inclusion: Principle 1 of the Range Management Policy directs that caribou ranges will be managed such that the amount of cumulative disturbance remains at or moves towards a level that supports a self-sustaining caribou population. As cumulative disturbance increases, the likelihood of the caribou population persisting decreases.
Discussion/Analysis: Quantitative assessment describing change in overall cumulative disturbance at the range level as a result of the activity. Description of how the activity is likely to influence maintaining or moving towards a level of cumulative disturbance that will support a self-sustaining population of caribou, and description of how change in disturbance caused by activity may potentially impact caribou population size and trend at the range level.

Criteria: Caribou Habitat
Indicator: Alignment with existing or proposed disturbance
Information Source(s): Ontario's Caribou Screening Tool, Integrated Range Assessment Reports, Best Management Practices
Rationale for Inclusion: Principle 1 of the Range Management Policy directs that caribou ranges will be managed such that the amount of cumulative disturbance remains at or moves towards a level that supports a self-sustaining caribou population. Aligning new activities with existing disturbance presents opportunities to minimize the overall cumulative disturbance at the range level. When planning activities, proponents should consider opportunities to align their activities with other existing and proposed activities to reduce the overall anthropogenic disturbance footprint at the range level. Proponents should consider an alternative which aligns with existing or planned disturbance to the extent possible.
Discussion/Analysis: Quantitative assessment describing the amount of overlap between the proposal and existing and planned disturbances. Referring to CST report(s) for the proposal, determine the amount of overlap with known disturbance on the range. Assess and compare how each alternative changes the cumulative disturbance footprint on the range and discuss the relationship between changes to the level of range disturbance for each alternative and how the change in disturbance may potentially impact caribou population size and trend on the range. Assessment should include description of why it is or is not feasible to align with existing disturbance.

Criteria: Caribou Habitat
Indicator: Habitat Amount and Arrangement
Information Source(s): Ontario's Caribou Screening Tool, Integrated Range Assessment Reports
Rationale for Inclusion: Principle 2 of the RMP directs the amount and arrangement of habitat within a range will be managed consistent with the level that has been estimated to occur in natural landscapes using the Simulated Ranges of Natural Variation (SRNV). Maintaining or moving towards the estimated amount of habitat that is within the middle fiftieth percentile of the SRNV and the arrangement of habitat with a mean patch size in

the 60% and greater proportion classes is assumed to provide a habitat condition that avoids conditions that may increase risk to caribou.
Discussion/Analysis: Using habitat statistics found in Ontario' Caribou Screening Tool reports, the proponent should describe how their proposed activity changes the amount and arrangement of suitable winter and refuge habitat at the range level, and how this change may impact caribou population size and trend.

Criteria: Caribou Habitat
Indicator: Category 1: High Use Area - Nursery Area Habitat directly impacted
Information Source(s): General Habitat Description (GHD), GHD mapping, LIO, Best Management Practices
Rationale for Inclusion: Principle 3 of the Range Management Policy directs that within a range, forest composition, pattern and structure will be managed to promote the maintenance of the ecological function of sub-range habitat features for caribou in the context of the range condition. Nursery Area habitat is an important habitat feature that directly supports reproduction in caribou populations and in some cases may be limited at the range level. Category 1: Nursery habitat is anticipated to have the low tolerance to alteration before the function or usefulness in supporting caribou is compromised.
Discussion/Analysis: Proponent should use the GHD mapping and information available through LIO to determine the number of and total amount of nursery habitat which will overlap with the project area (ie. amount of this habitat that will be lost should the proposal proceed in that location). A quantitative comparison of the amount of nursery habitat impacted compared to the total amount of nursery habitat available on the range and in the vicinity of the project should be included. A qualitative discussion of the significance of that nursery habitat impacted by the project to the range should be included, as should a discussion of the anticipated impacts to the function/usefulness of the nursery habitat immediately and in the future and potential impacts to caribou population size and trend as a result of impacts to this habitat. Alternatives which would avoid these features to the extent possible should be considered.

Criteria: Caribou Habitat
Indicator: Category 1: High Use Area - Winter Use Areas directly impacted
Information Source(s): General Habitat Description (GHD), GHD mapping, Best Management Practices, LIO
Rationale for Inclusion: Principle 3 of the Range Management Policy directs that within a range, forest composition, pattern and structure will be managed to promote the maintenance of the ecological function of sub-range habitat features for caribou in the context of the range condition. Winter use areas are important habitat features that support caribou survival through the winter months by providing ground lichen for winter forage. Category 1: Winter Use Area habitat is anticipated to have the low tolerance to alteration before the function or usefulness in supporting caribou is compromised.
Discussion/Analysis: Proponent should use the GHD mapping to determine the number of and total amount of winter use area habitat which will overlap with the project area (ie. amount of this habitat that will be lost should the proposal proceed in that location). A quantitative comparison of the amount of winter use area habitat impacted compared to the total amount of winter use area habitat available on the range and in

the vicinity of the project should be included. A qualitative discussion of the significance of that winter use area habitat impacted by the project to the range should be included, as should a discussion of the anticipated impacts to the function/usefulness of the winter use area habitat immediately and in the future and potential impacts to caribou population size and trend as a result of impacts to this habitat. Alternatives which would avoid these features to the extent possible should be considered.

Criteria: Caribou Habitat
Indicator: Category 1: High Use Area - Travel Corridors directly impacted
Information Source(s): General Habitat Description (GHD), GHD mapping, Best Management Practices
Rationale for Inclusion: Principle 3 of the Range Management Policy directs that within a range, forest composition, pattern and structure will be managed to promote the maintenance of the ecological function of sub-range habitat features for caribou in the context of the range condition. Travel Corridors are important habitat features that caribou use to move between Nursery Areas and Winter Use Areas. Category 1: Travel Corridor habitat is anticipated to have the low tolerance to alteration before the function or usefulness in supporting caribou is compromised.
Discussion/Analysis: Proponent should use the GHD mapping to determine the number of and total amount of travel corridors which will overlap with the project area (ie. amount of this habitat that will be lost should the proposal proceed in that location). A quantitative comparison of the amount of travel corridor habitat impacted compared to the total amount of travel corridor habitat available on the range and in the vicinity of the project should be included. A qualitative discussion of the significance of the travel corridor habitat impacted by the project to the range should be included, as should a discussion of the anticipated impacts to the function/usefulness of the travel corridor habitat immediately and in the future and potential impacts to caribou population size and trend as a result of impacts to this habitat. This should also present information about the associated nursery area and winter habitat that the travel corridor connects, and the anticipated indirect impacts to this habitat if the function/usefulness of the travel corridor changes. Alternatives which would avoid these features to the extent possible should be considered.

Criteria: Caribou Habitat
Indicator: Category 2 Habitat: Seasonal Ranges impacted by proposal
Information Source(s): General Habitat Description (GHD), GHD mapping, Best Management Practices
Rationale for Inclusion: Principle 3 of the Range Management Policy directs that within a range, forest composition, pattern and structure will be managed to promote the maintenance of the ecological function of sub-range habitat features for caribou in the context of the range condition. Seasonal Ranges are areas of currently available habitat which are used by caribou year-round. Category 1 habitat is generally nested within Seasonal ranges and is dependent on the refuge function provided at a larger spatial scale. Seasonal Ranges may also provide connectivity between Category 1 habitat

areas. Seasonal Ranges are anticipated to have a moderate tolerance to alteration before

Discussion/Analysis: Proponent should use GHD mapping to quantify the total amount of Category 2 habitat which will be directly impacted by the proposal. This should be compared to the total amount of Category 2 habitat available on the range and in the vicinity of the project. The proponent should qualitatively describe anticipated changes to function and usefulness of the Category 2 habitat to the species, including potential changes to forest structure and composition, effects cause by habitat fragmentation (including impacts to connectivity of Category 1 habitat), and effects caused by habitat conversion to habitat that supports alternate prey species (e.g. moose, deer) and/or predators (e.g. wolves, bears) and results in habitat that is no longer suitable for caribou. A quantitative and qualitative analysis of how the project may affect availability of biophysical features and forest composition (i.e., age class, spatial arrangement and species) needed to sustain Category 2 habitat) and how the activity may reduce refuge or forage values within the Category 2 habitat should be presented.

Criteria: Caribou Habitat
Indicator: Category 3 Habitat (Remaining Areas in the Range) impacted by proposal
Information Source(s): General Habitat Description (GHD), GHD mapping, Best Management Practices
Rationale for Inclusion: Principle 3 of the Range Management Policy directs that within a range, forest composition, pattern and structure will be managed to promote the maintenance of the ecological function of sub-range habitat features for caribou in the context of the range condition. Category 3 habitat support caribou indirectly by maintaining the overall refuge function within the range. These areas are generally not currently occupied for long periods of time, however caribou may travel through them. It is anticipated that Category 3 Habitat will become used in the future as either Category 1 or Category 2 Habitat when forest cover matures and connectivity is restored. Category 3 Habitat is important with respect to providing for habitat in the future, however, it generally has a higher tolerance when compared to other sub-range habitat features.
Discussion/Analysis: Proponent should use GHD mapping to quantify the total amount of Category 3 habitat which will be directly impacted by the proposal. This should be compared to the total amount of Category 3 habitat available on the range and in the vicinity of the project. The EA should provide a description of how the activity may impact the function/usefulness of Category 3 habitat by describing how the future maturation to Category 1 or 2 habitat may be prevented or slowed by the activity, how changes to physical features and composition and distribution of forest cover may result in loss of areas for foraging and/or reproduction and rearing in the future, and how fragmentation of the Category 3 habitat may impact connectivity between adjacent existing Category 1 and Category 2 habitat.

Criteria: Caribou Habitat
Indicator: Number of Category 1 Habitat (Nursery Areas, Winter Use Areas, Travel Corridors) found within 10 km of the proposal

Information Source(s): CST, GHD mapping, LIO, District Office.
Rationale for Inclusion: Caribou may avoid suitable Category 1 locations due to sensory disturbance from development and recreational activities when selecting Nursery Areas, Winter Use Areas and/or Travel Corridors. Activities within 10 km of these features may therefore indirectly impact the use and function of these sites for caribou.
Discussion/Analysis: Proponent should analyze the number of Nursery Areas, Winter User Areas and Travel Corridors within 10 km of their proposal, and describe the anticipated impacts to function/usefulness of these features as a result of the project. A discussion of the significance of these features immediately and in the future and potential impacts to caribou population size and trend as a result of impacts to this habitat should be presented, as well as the availability of Nursery Areas, Winter Use Areas and Travel Corridors on the Range should be addressed.

2.3.2 Criteria and Indicators for Caribou (Species)

Criteria: Caribou (Species)
Indicator: Incidental mortality due to anthropogenic impacts (e.g. vehicular collisions, increased hunting pressure)
Information Source(s): LIO (e.g. caribou occurrence data), project location mapping
Rationale for Inclusion: Traffic from vehicles using new or existing transportation corridors which support the construction and/or operation of the project may increase risk of road mortality for caribou. Increased access (e.g. new roads, trails) or easier accessibility (e.g. travel through cleared areas under transmission corridors) may increase hunting pressure on caribou and result in higher levels of mortality as an indirect result of the project.
Discussion/Analysis: Using caribou observation information and describing any new transportation corridors (roads, trails) associated with the project or anticipated increased use of existing roads/trails, the proponent should describe any potential increases in caribou mortality due to vehicular collisions or increased hunting pressure that may occur as a result of the project. A description of any anticipated impacts to population size and trend due to increased anthropogenic pressures should be included.

Criteria: Caribou (Species)
Indicator: Indirect mortality due to increased alternate prey sources (moose and deer) leading to increased predation (wolves, bears, etc.) and increased potential for spread of disease (e.g. brainworm).
Information Source(s): CEF, Caribou/Wolf/Moose Occupancy Model (Polley et al.), LIO, CCP, Moose Aerial Inventory data.
Rationale for Inclusion: Disturbed areas can provide favourable conditions for conversion of caribou habitat to habitat which supports increased browse for moose and deer, and subsequent increase in wolf/bear populations as prey levels increase. Wolves and bears may then prey on caribou remaining in these areas. Increased influx of alternate ungulates (e.g. deer, moose) increases the potential for transmission of

diseases such as brainworm to caribou. Additionally, increased linear features on the landscape (e.g. roads, transmission corridors) may act as travel corridors for prey species allowing for more efficient travel across the landscape.
Discussion/Analysis: Should include a description of how the activity may increase potential predator activity by discussing how the activity may result in conversion of habitat that is more productive for predators (bears and wolves); therefore resulting in higher population densities of these species. Should describe how the activity may contribute to enhanced predator efficiency or increased predator encounters. Should describe how increased predator activity may result in direct mortality or changes to recruitment due to changes in predation pressure. Should describe any anticipated impacts to population size or trend as a result of increased predation. Should describe how activity may increase access to potential habitat for alternative ungulates (e.g. deer, moose) which may act as disease vectors to caribou and how potential increased presence of disease may impact caribou populations.

Criteria: Caribou (Species)
Indicator: Indirect impacts due to sensory disturbance (e.g. light, sound, vibrations, olfactory)
Information Source(s): LIO, General Habitat Description (GHD), GHD mapping
Rationale for Inclusion: Adverse effects to caribou may result from sensory disturbances such as light, sound and vibrations associated with proposals. Caribou may avoid sub-range habitat features due to sensory disturbance from activities which may adversely affect their ability to perform one or more of their life processes and may impact their movement and distribution across the range. Caribou are particularly sensitive to sensory disturbances during certain times of the year, as outlined in the GHD.
Discussion/Analysis: Using caribou observation information and considering types of sensory disturbances that may be associated with their activity and the timing of their activity, the proponent should qualitatively describe the anticipated impacts to caribou due to sensory disturbance. This should include changes to physiology, behaviour, and any potential impact that may impair the species ability to carry out its life processes (e.g. calving, foraging, travelling, nursing young).

2.3.4 Other Criteria and Indicators Relevant to Caribou

Criteria: Consistency with Existing Resource Management Direction
Indicator: Consistency with approved Forest Management Plans
Information Source(s): Forest Management Plans for FMU(s) in which the activity will take place
Rationale for Inclusion: Long-term provision of caribou habitat is planned and provided for through Dynamic Caribou Habitat Schedules (DCHS) found in FMPs. The DCHS outlines mosaic blocks which either provide caribou habitat at a given time, are available for harvest at a given time, or are being regenerated to provide caribou habitat in the future. The planned arrangement of forest blocks can provide connectivity across the land scape and loss of certain blocks may have significant impacts to habitat

connectivity. Additional activities on the landscape not accounted for in the FMP may impact the provision of future caribou habitat by impacting the DCHS. FMPs also contain operational direction relevant to caribou (e.g. road management strategies) which may be influenced by additional activities on the landscape.
Discussion/Analysis: The proponent should discuss quantitatively the amount of area within mosaic block(s) that is being taken up by the proposal, and qualitatively describe impacts that removing this area from the mosaic block(s) will have on the DCHS over time and on the ability of the forest operator to meet objectives, indicators and desirable and target levels for provision of caribou habitat over time. The proponent should also discuss potential impacts to road management strategies related to caribou, especially when proposing new access roads as part of their project. Costs associated with potential FMP revisions should also be assessed.

Criteria: Consistency of Existing Resource Management Direction
Indicator: Consistency with Cervid Ecological Framework
Information Source(s): Cervid Ecological Framework
Rationale for Inclusion: The Cervid Ecological Framework provides management direction for Cervid Populations throughout Ontario and is divided into various zones each with specific objectives.
Discussion/Analysis: The EA should describe whether or not the project will impact the objectives for the Cervid Ecological Zone (CEZ) in which the project is proposed to occur.

Criteria: Consistency with existing Resource Management Direction
Indicator: Consistency with protected areas management direction
Information Source(s): Protected Areas management direction for individual Provincial Parks or Conservation Reserves
Rationale for Inclusion: Management direction for protected areas may contain direction with respect to caribou habitat management and protected areas often contribute to providing key landscape level connectivity for caribou. Decisions made by MNRF with respect to activities which are proposed to occur in Provincial Parks or Conservation Reserves must be consistent with this management direction and the Provincial Parks and Conservation Reserves Act.
Discussion/Analysis: Should include description of content in the management direction related to caribou/caribou habitat and qualitative discussion of how project is or is not consistent with the management direction.

Criteria: Consistency with existing Land Use Direction
Indicator: Consistency with area-specific Crown Land Use Policies
Information Source(s): Area-specific Crown Land Use Policies
Rationale for Inclusion: Some area-specific Crown Land Use Policies contain specific direction with respect to caribou management. MNRF considers direction contained in Crown Land Use Policy when making decisions. Proponents are encouraged to develop projects that are consistent with approved land use policies, both with respect to direction for caribou and for other interests.

Discussion/Analysis: Should include description of direction in CLUPA related to caribou/caribou habitat and qualitative discussion of how project is or is not consistent with these area specific policies and direction within them.

Criteria: Consistency with existing Land Use Direction
Indicator: Consistency with Far North Community Based Land Use Plans (CBLUPs)
Information Source(s): CBLUPs
Rationale for Inclusion: CBLUPs may contain direction for management of caribou and caribou habitat, or for management of wildlife species in general. Decisions made by MNRF must be consistent with direction found in CBLUPs.
Discussion/Analysis: Should include description of direction in CBLUP related to caribou/caribou habitat and qualitative discussion of how project is or is not consistent with the CBLUP.

3.0 Impact Management

For each potential impact to caribou or caribou habitat measures will be have to be identified to first, avoid any adverse effects, and in the case there is no practical or feasible alternative, measures be identified to minimize or mitigate the adverse effects. Such measures may be general, site-specific or activity specific in nature. MNRF has developed Best Management Practices (BMPs) for some sectors to provide guidance to avoid, minimize or mitigate adverse effects to caribou and caribou habitat. Where possible, it is always preferential to avoid, given that if any adverse impacts exist, the associated activities would require authorization under the ESA.

Proponents should describe the effect that is being addressed, the measures being proposed (what will be implemented, when, where and how actions will be applied), and the anticipated net effects after measures are applied to caribou and caribou habitat. Proponents should also describe how they plan to monitor effectiveness of the impact management measures and steps they plan to take should the impact management measures be found to be ineffective.

4.0 Net Effects

Net effects remaining after the application of the impact management measures will be documented. The determination of net effects must be conducted for each alternative and a discussion of the net effects and comparison of the net effects for each alternative should be included.

5.0 Advantages and Disadvantages

The advantages and disadvantages of each alternative method with respect to net effects to caribou and caribou habitat for the lifecycle of the project should be documented. The proponent should consider the potential need for ESA authorizations and associated costs when assessing advantages and disadvantages associated with each alternative. High costs associated with ESA permitting requirements may be disadvantageous to some proponents.

6.0 Identification of the Undertaking

The proponent must identify their preferred alternative (the undertaking) and provide detailed rationale for selection of that alternative. MNRF recognizes that the preferred alternative may not be the best alternative for caribou, but detailed rationale regarding why the best alternative for caribou was not selected should be included in this part of the EA.

7.0 EA Documentation

Evaluation of impacts to caribou and caribou habitat, as described above, should be thoroughly documented in the main EA document, as well as any relevant technical appendices. For ease of agency review, MNRF would suggest that a separate chapter of the EA be dedicated to the assessment of impacts to caribou and caribou habitat. Appropriately developed EA documentation may support meeting some of the requirements of the ESA authorization process.

8.0 Commitments and Monitoring

MNRF recommends that the EA contain commitments to monitoring to verify the expected effects of the proposed undertaking on caribou and caribou habitat and to determine if additional impact mitigation measures or adjustments to any measures are required. Monitoring methodology for caribou and caribou habitat should be included in the monitoring plan developed as part of the EA. If impact management measures for caribou/caribou habitat are proposed, monitoring of the effectiveness of these measures should be included in the monitoring plan. The monitoring plan should include steps the proponent will take if impact management measures are not effective (e.g. application of additional impact management measures, changing how and where the activity will be performed, etc.).

9.0 ESA Authorizations

If MNRF determines a contravention of the ESA is likely to occur as a result of the activity, and proponents are unable to avoid the contravention, an authorization under the ESA will be required for the activity to proceed. During the EA process, it is in the proponent's best interest to be aware of the requirements of the ESA authorization process and information required by MNRF to determine if a contravention of the ESA will occur as a result of their activity.

The proponent should endeavour to avoid or minimize adverse impacts to species at risk during the planning of their project during the Environmental Assessment. It should be noted that requirements for overall benefit authorizations under section 17(2)(c) of the ESA are scaled and assessed on a contextual basis (e.g. species by species and activity by activity) and that activities with greater adverse impacts will be required to demonstrate greater overall benefit to the species which are impacted.

MNRF strongly encourages proponents to familiarize themselves with ESA authorization process requirements and prepare documentation as part of their EA that would support fulfilling these requirements. MNRF will only consider issuance of an ESA authorization if the proponent is able to clearly demonstrate that they have met their

Environmental Assessment Act requirements. Consideration of ESA permitting requirements during the preparation of EA documentation can assist proponents in avoiding duplication of efforts and avoid the need to conduct additional studies to inform ESA permitting. Proponents can contact MNRF to discuss how to best coordinate study and documentation requirements from both processes.

APPENDIX D

MEMORANDUM

TO Gillianne Marshall, Regional Planner (MNRF) **DATE** July 7, 2016

CC Stephen Cookson, Juan Anderson and John Reid (Wataynikaneyap Power L.P.)

FROM Allen Eade **PROJECT No.** 1535751 - GAL-054-TM-V3

PHASE 1 NEW TRANSMISSION LINE TO PICKLE LAKE PROJECT – RESPONSE TO MNRF RECOMMENDED APPROACH FOR WOODLAND CARIBOU EFFECTS ASSESSMENT

On December 21, 2015, Golder Associates Ltd. (Golder) provided the Ministry of Natural Resources and Forestry a proposed detailed woodland caribou assessment approach for the Wataynikaneyap Power L.P. (Wataynikaneyap) Phase 1 New Transmission Line to Pickle Lake Project (the Project) for review. The proposed detailed assessment approach included the identification of draft indicators for the woodland caribou effects assessment. In response to the proposal approach provided by Golder, on April 14, 2016, the MNRF provided their recommended guidance. This memorandum outlines how Wataynikaneyap will incorporate MNRF guidance in the caribou effects assessment.

1.0 ENVIRONMENTAL ASSESSMENT APPROACH

Wataynikaneyap is applying a consistent assessment approach for all ecological criteria, including woodland caribou. The approach uses assessment endpoints and measurement indicators to predict impacts to criteria.

Assessment endpoints are attributes of a criterion that are used to assess the significance of residual effects on that criterion, and to represent the key properties of the criterion that should be protected. For wildlife criteria, the assessment endpoint is self-sustaining and ecologically effective populations.

Measurement indicators represent properties of the environment that can be used to characterize changes in a criterion's assessment endpoints in a meaningful way. Measurement indicators may be characterized through quantitative or qualitative means, depending on the available information. Measurement indicators for wildlife include habitat availability (quantity and quality), habitat distribution (arrangement and connectivity), and survival and reproduction.

The goal of the Caribou Conservation Plan for Ontario is in line with Wataynikaneyap's definition of the assessment endpoint for caribou and how significance of impacts will be determined. Similarly, the three principles for the Range Management Policy reflect Wataynikaneyap's measurement indicators.

All the information sources identified by the MNRF will be used in the environmental assessment (EA) to describe the existing conditions and provide context for predicting the incremental and cumulative effects from the Project and previous, existing and reasonably foreseeable developments. A key assumption in Wataynikaneyap's ability to incorporate these information sources is that they will be available for use at least 6 months prior to submission of the EA.

For consistency across the ecological components of the EA, Wataynikaneyap will incorporate, evaluate and discuss the requested "MNRF criteria" and associated "MNRF indicators" (p. 10-11, MNRF letter dated April 14, 2016) under the relevant measurement indicators. The "MNRF criteria" for caribou habitat and caribou (species protection) are consistent with Wataynikaneyap's identified measurement indicators of habitat availability, habitat

distribution, and survival and reproduction. The analysis and discussion of the associated indicators identified by the MNRF will be incorporated in the analysis of the relevant measurement indicator (see Table below).

The “MNRF criteria” related to maintaining consistency with existing resource management and land use directions do not have a direct linkage to measurement indicators because the effects assessment is focussed on potential effects to caribou habitat and populations, and not on effects to policies, plans, and directions. That is, consistency with stated objectives of various plans and policies are not indicative of measureable change in environmental conditions that could lead to a change in the assessment endpoint for caribou (i.e., self-sustaining and ecologically effective population). Rather, these “MNRF criteria” relate to the rationale and justification for the selection of the assessment endpoint.

The following table provides a summary of how Wataynikaneyap will incorporate the MNRF’s indicators into the caribou effects assessment.

MNRF Indicator [a]	Wataynikaneyap Assessment Approach	Corresponding Wataynikaneyap Measurement Indicator
Range Condition Qualitative assessment describing why an activity is proposed to occur in a given range where the condition may not be sufficient to sustain caribou or may be uncertain to sustain caribou.	■ Not directly linked to proposed approach ■ This requirement is outside the scope of the caribou assessment section. The guidance appears to be linked to the rationale for the identification of the alternate corridors. The identification of the corridors was discussed in Section 6.2.2.1 Identification of Transmission Corridor Options and Alternatives in the Amended Terms of Reference, which was approved by the MOECC. ■ As stated in Section 8.0 Assessment and Evaluation of the Amended ToR, a final corridor routing analysis will be completed that considers all disciplines, including woodland caribou. ■ This proposed indicator will be not incorporated into the woodland caribou assessment, but rationale for the Project will be reiterated within the EA.	■ None
Cumulative Disturbance at Range Level Quantitative assessment describing change in overall cumulative disturbance at the range level as a result of the activity. Assessment of how change in disturbance caused by activity may potentially impact caribou population size and trend at the range level.	■ Use CST-derived statistics to report change in overall cumulative disturbance at the range level ■ Discuss the implications of change in disturbance levels on the population growth rate using the relationship developed by Environment Canada (2011) and used by MNRF (2014). **Assumptions:** disturbance statistics will be generated by the CST. If CST is not available, Wataynikaneyap will calculate change in disturbance statistics based on EC (2011) methods and available disturbance inventory data.	■ Habitat availability (i.e., quantity and quality) ■ Survival and reproduction
Alignment with existing or proposed disturbance Quantitative assessment describing the amount of overlap between the proposal and existing and planned disturbances. Assessment of how change can impact population size and trend.	■ Use CST derived statistics to quantify the amount (km) and proportion (%) of Project that overlaps with existing and planned disturbances. ■ Calculate length (km) and density (km/km^2) of existing disturbance density and quantify percent change in linear feature density as a result of the project. **Assumptions:** CST will be available. If CST is not available, Wataynikaneyap will use information on existing disturbance (from Land Information Ontario and information) and planned disturbances from available information to calculate amount (km) and proportion (%) of Project that overlaps with existing and planned disturbances.	■ Habitat availability (i.e., quantity and quality) ■ Habitat distribution (i.e., arrangement and connectivity) ■ Survival and reproduction

MNRF Indicator [a]	Wataynikaneyap Assessment Approach	Corresponding Wataynikaneyap Measurement Indicator

Habitat Amount and Arrangement
 	
Using habitat statistics found in the CST reports, the proponent should describe how their proposed activity changes the amount and arrangement of suitable winter and refuge habitat at the range level. Assessment of how change can impact population size and trend.
	■ Use CST-derived statistics to report:
	  ▪ area of winter and refuge habitat available in the range and how those amounts compare to the SRNV
	  ▪ area of winter and refuge habitat affected in the range and how remaining amounts compare to the SRNV
	■ Use CST-derived maps to discuss:
	  ▪ change in arrangement of winter and refuge habitat as a result of the project.
	Assumptions: CST will be available, and digital files of winter and refuge habitat will be provided. If the CST is not available, Wataynikaneyap will apply the conventional boreal model (Elkie et al. 2014) to identify winter and refuge habitat based on FRI and Ontario Land Cover data. SRNV statistics will be extracted from the Ontario Landscape Tool.
		■ Habitat availability (i.e., quantity and quality)
		■ Habitat distribution (i.e., arrangement and connectivity)
		■ Survival and reproduction

Category 1: High Use Areas Directly Impacted (Nursery Area Habitat, Winter Use Areas, Travel Corridors)
 	
and
 	
Number of Category 1 Habitat (Nursery Area Habitat, Winter Use Areas, Travel Corridors) found within 10 km of the proposal
 	
Use the GHD mapping and information available through LIO to determine the number of and total amount of high use areas which will overlap with the project area (i.e., amount of this habitat that will be lost should the proposal proceed in that location). Compare the amount of high use areas impacted to the total amount available in the range. Discuss impacts to caribou population size and trend as a result of changes.
 	
Analyze the number of Nursery Areas, Winter User Areas and Travel Corridors within 10 km of their proposal, and describe the anticipated impacts to function/usefulness of these features as a result of the project.
	■ Use digital GHD mapping files to:
	  ▪ calculate number, area, and proportion of nursery habitat, winter use habitat, and travel corridors directly affected by the Project
	  ▪ identify high use areas within 10 km of the Project and discuss potential change to relative quality of those habitats
	■ Produce maps of high use areas to qualitatively describe the change in arrangement and connectivity of high use areas.
	■ Discuss the function and importance of high use areas and potential implication of impacts to those habitats
	Assumptions: digital files of the GHD mapping will be available. If GHD mapping is not available, it will be produced through a model developed by Wataynikaneyap using Forest Resource Inventory and existing publicly available data.
		■ Habitat availability (i.e., quantity and quality)
		■ Habitat distribution (i.e., arrangement and connectivity)
		■ Survival and reproduction

MNRF Indicator [a]	Wataynikaneyap Assessment Approach	Corresponding Wataynikaneyap Measurement Indicator
Category 2 Habitat: Seasonal Ranges impacted Use GHD mapping to quantify the total amount of Category 2 habitat, which will be directly impacted. Compare the amount of seasonal range areas impacted to the total amount available in the range.	■ Use digital GHD mapping files to: ▪ calculate area and proportion of seasonal affected by the Project ■ Produce maps of seasonal ranges to qualitatively describe the change in arrangement and connectivity of seasonal ranges. ■ Discuss the function and importance of seasonal ranges and potential implication of impacts to those habitats. **Assumptions:** digital files of the GHD mapping will be available. If GHD mapping is not available, it will be produced through a model developed by Wataynikaneyap using Forest Resource Inventory and existing publicly available data.	■ Habitat availability (i.e., quantity and quality) ■ Habitat distribution (i.e., arrangement and connectivity) ■ Survival and reproduction
Category 3 Habitat (Remaining Areas in the Range) impacted Use GHD mapping to quantify the total amount of Category 3 habitat, which will be directly impacted by the proposal.	■ Use digital GHD mapping files to: ▪ calculate area and proportion of Category 3 habitat affected by the Project ■ Produce maps of Category 3 habitat to qualitatively describe the change in arrangement and connectivity of seasonal ranges. ■ Discuss the function and importance of Category 3 habitat and potential implication of impacts to those habitats. **Assumptions:** digital files of the GHD mapping will be available. If GHD mapping is not available, it will be produced through a model developed by Wataynikaneyap using Forest Resource Inventory and existing publicly available data.	■ Habitat availability (i.e., quantity and quality) ■ Habitat distribution (i.e., arrangement and connectivity) ■ Survival and reproduction
Incidental mortality due to anthropogenic impacts (e.g. vehicular collisions, increased hunting pressure) Using caribou observation information and describing any new transportation corridors (roads, trails) associated with the project or anticipated increased use of existing roads/trails, the proponent should describe any potential increases in caribou mortality due to vehicular collisions or increased hunting pressure that may occur as a result of the project.	■ Literature review and summary of mitigation for the Project, and qualitative discussion of potential impacts to caribou.	■ Survival and reproduction
Indirect mortality due to increased alternate prey sources (moose and deer) leading to increased predation (wolves, bears, etc.) and increased potential for spread of disease (e.g. brainworm). Description of how the activity may increase potential predator activity by discussing how the activity may result in conversion of habitat that is more productive for predators (bears and wolves); therefore resulting in higher population densities of these species.	■ Literature review and summary of mitigation and best management practices for the Project, and qualitative discussion of potential impacts to caribou.	■ Survival and reproduction

MNRF Indicator [a]	Wataynikaneyap Assessment Approach	Corresponding Wataynikaneyap Measurement Indicator
Indirect impacts due to sensory disturbance (e.g. light, sound, vibrations, olfactory) Using caribou observation information and considering types of sensory disturbances that may be associated with their activity and the timing of their activity, the proponent should qualitatively describe the anticipated impacts to caribou due to sensory disturbance (e.g., changes in physiology and behaviour that affect foraging and reproduction).	■ Literature review and summary of mitigation for the Project, and qualitative discussion of potential impacts to caribou.	■ Survival and reproduction
Consistency with approved Forest Management Plans Discuss quantitatively the amount of area within mosaic block(s) that is being taken up by the proposal, and qualitatively describe impacts that removing this area from the mosaic block(s) will have on the DCHS over time and on the ability of the forest operator to meet objectives, indicators and desirable and target levels for provision of caribou habitat over time.	■ Use CST derived statistics to: ▪ identify number and area of DCHS polygons that overlap with the Project ▪ discuss results in relation to the effects on the assessment endpoint for caribou ■ The assessment of changes in mosaic blocks and DCHS from the Project in relation to meeting objectives, indicators, desirable levels and target levels of applicable FMPs are not components of the effects assessment on caribou for the Project. It is assumed that the target levels of the FMPs have already been incorporated into the DCHS, which will be a component of the assessment on effects to woodland caribou. ■ Cost associated with potential FMP revisions will not be assessed ■ Objectives of the FMPs will be considered in the description of the assessment endpoint for caribou. **Assumptions:** digital files of the DCHS will be available via the CST, for map creation. If the CST is not available, digital files of the DCHS for all FMPs that overlap with the Project will be provided directly from forestry companies at least 6 months before submission of the EA.	■ Habitat availability (i.e., quantity and quality) ■ Habitat distribution (i.e., arrangement and connectivity)

MNRF Indicator [a]	Wataynikaneyap Assessment Approach	Corresponding Wataynikaneyap Measurement Indicator
Consistency with Cervid Ecological Framework, protected areas management direction, Crown Land Use Policies (CLUPs), and Far North Community Based Land Use Plans (CBLUPs) Describe whether or not the project will impact the objectives for the Cervid Ecological Zone (CEZ) in which the project is proposed to occur. Description of content in the protected areas management direction related to caribou/caribou habitat and qualitative discussion of how project is or is not consistent with the management direction. Description of direction in CLUPs related to caribou/caribou habitat and qualitative discussion of how project is or is not consistent with these area specific policies and direction within them. Description of direction in CBLUPs related to caribou/caribou habitat and qualitative discussion of how project is or is not consistent with these area specific policies and direction within them.	■ These indicators will not be incorporated into the caribou assessment because consistency with stated objectives is not indicative of measureable change in environmental conditions that could lead to a change in the caribou's assessment endpoint.	■ None

Notes:

a) From MNRF (2016).

CBLUP = Community Based Land Use Plan; CEF = Cervid Ecological Framework; CLUP = Crown Land Use Policies; CST = caribou screening tool; DCHS = dynamic caribou habitat schedule; FMPs = Forest Management Plan; FRI = Forest Resource Inventory; GHD = general habitat description for the woodland caribou (MNR 2013b); IRARs = integrated range assessment reports; MOECC = Ministry of Environment and Climate Change; SRNV = Simulated Range of Natural Variability.

APPENDIX E

Ministry of Natural Resources and
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July 19th, 2018

Sent via email

Sasha McLeod
Special Project Officer – Environmental Assessment and Permissions Branch
Ministry of Environment, Conservation and Parks

RE: Wataynikaneyap Transmission Project, Final EA IR responses

Ms. McLeod:

The Ministry of Natural Resources and Forestry (MNRF) has completed the review of Wataynikaneyap's responses to the MNRF's Information Requests (IRs) on the final Environmental Assessment (EA) for the Wataynikaneyap Phase 1 Transmission Line project. As requested by the Ministry of Environment, Conservation and Parks (MECP) MNRF has provided a determination of whether the EA appropriately identifies, considers and addresses MNRF mandated interests with the addition of the submitted responses to the Information Requests.

From MNRF's perspective the Environmental Assessment and responses provided to the IRs meet many but not all of the information needs to suit the mandated interests of MNRF. MNRF has worked with MECP to outline recommended actions required by Wataynikaneyap to address the outstanding items. Once these actions have been completed, the IRs can be considered closed.

The nature of these recommended actions are highlighted below:

- additional information or clarification to be included in the amended EA
- actions to address gaps that are to be prepared as a condition of EA approval
- actions requiring commitments from Wataynikaneyap prior to EA approval
- actions requiring additional analysis and information to support project permitting

There are IRs that will be found under more than one recommended action.

Recommended Action #1: Include information provided in the IR response in the Amended EA.

In several instances the Final EA lacked the detail required for MNRF to be able to replicate or trace how the analysis was conducted and how conclusions were drawn.

Wataynikaneyap has since provided additional information in the IR responses on the approach used and assumptions made. In lieu of the errata log, the clarification provided in the IR responses should be available to all readers of the EA. Though MNRF had previously advised some of the IRs below were completed, MNRF would like the additional information provided by Wataynikaneyap included in the Amended EA.

Please include the responses provided from the following IRs in the Amended EA document:

DEC-MNRF-7	49519	49565	49555	49550
49551	49539	49522	49448	49574
49470	49581	49511	49512	49549
49494	49452	49578	49521	49524
49505	49533	49537	49566	49453
49439	49442	49552		

Recommended Action #2: A correction, edit or clarification to the information provided in the EA is required. This information needs to be incorporated into the Amended EA to provide readers with a better understanding of the intent of the analysis.

An attachment accompanies this letter which outlines the corrections or edits that are needed for clarification. MNRF acknowledges that some of the comments below were previously addressed; however, MNRF would like to ensure the clarification provided is included in the Amended EA.

Applies to the following IRs:

49444	49510	49462
49558	49546	49495
49575	49560	49525
49554	49576	

Recommended Action #3: The following IRs described Mitigation Measures. These will be considered as Commitments by Wataynikaneyap or as a Condition of Approval.

MNRF acknowledges that some of the IRs below have been previously responded to as complete. MNRF would like to ensure they are included within commitments described in Chapter 12 of the Amended EA.

Applies to the following IRs:

DEC-MNRF-7	49517	49567	49431	49496
49557	49483	49530	MNRF-COV-07	49561
49476	49471	49475	49571	49446
49447	49477	49478	49565	49581
49456				

Recommended Action #4: A Detailed Work Plan describing the final project footprint, scope of work, construction schedule, site specific mitigation measures, timing restrictions, etc. will be provided to MNRF and MECP in advance of permit applications. This will be a Condition of Approval of the EA.

The contents of a Detailed Project Plan can include, and will not be limited to:

- Final locations of all project components (roads, laydown areas and construction camps).
- Description of the life cycle of each project component – construction timing, operation, maintenance and decommissioning (schedule, mitigation, approach, contacts etc.).
- Sediment Control Plan (all phases of project and different water crossing types, understanding of when crossing types are required).
- Road Use Management Strategies for all existing and new roads on Crown land (responsibilities for maintenance and ownership, standard of construction, use/intent, term, decommissioning).
- Construction Operation Plan (phased approach, permit requirements, timing, how to cross water courses, equipment, materials to be used, commitment to no fording of streams, un-mapped streams reconnaissance protocol)
- Monitoring program should describe; what to assess, what steps will be taken if a problem occurs, maintenance, repairs, mitigation for washouts, notification of MNRF and Department of Fisheries and Oceans Canada (DFO). MNRF will need to see a commitment to monitoring throughout the construction period.
- Maintenance Plan (access, vegetation management, emergency services)
- Decommissioning plans (re-vegetation plan, procedure for removal of water crossings and roads (who, how and when), consideration to SAR habitat, method of re-vegetation (natural, planning, seeding, equipment, timelines, species etc.).
- Timber Salvage Plan (differentiates between conifer and deciduous, FMP and SFL identification, scale wood, stacked/piled, markets/alternative uses, use of biomass, cleanup plan).
- Detailed approach to meeting the requirements in provincial parks and conservation reserves, including all aspects of S.20 and 21 of the Provincial Parks and Conservation Reserves Act (PPCRA).
- Consultation Plan (ongoing commitment to communicate with Indigenous communities and Forest industry, among others). Ensure that impacts have been appropriately communicated to stakeholders.
- Updated Record of Consultation to reflect ongoing discussions on the detailed project plan.

Some of the IRs listed below have already been responded to by MNRF as addressed. They are provided below to demonstrate that this detail will be required within the detailed workplan as well.

Applies to the following IRs:

DEC-MNRF-15	49547	49482	49472	49491
49467	49503	MNRF-COV-06	DEC-MNRF-6	49469
DEC-MNRF-16	49468	49516	49489	49564
49492	49490	MNRF-COV-01	MNRF-COV-02	MNRF-COV-03
MNRF-COV-09	49464	49432	49516	49443
MNRF-COV-11	49434	MNRF-Socio-Ec-01	DEC-MNRF-1	DEC-MNRF-3
DEC-MNRF-4	DEC-MNRF-13	49497		

Further detail regarding workplan requirements can be discussed with MNRF and MECP.

Recommended Action #5: Develop a comprehensive assessment of impacts to caribou and caribou habitat and proposed mitigation actions for the preferred corridor and final project footprint. The comprehensive assessment will be provided to MNRF and MECP as a Condition of Approval of the EA and will support permit applications under the Endangered Species Act (ESA).

The EA presented an assessment of the potential impacts of the proposed project on caribou. MNRF has provided several comments related to the accuracy, adequacy, assumptions and completeness of that assessment. Prior to the review of permit applications under the ESA MNRF requires a comprehensive assessment of the impacts of the preferred corridor on caribou and their habitat.

This comprehensive assessment should follow the recommended approach described in our letter to Mr. Eade on April 14th, 2016; thereby resulting in a fulsome assessment and documentation of impacts to caribou and caribou habitat. This assessment shall be completed by Wataynikaneyap and confirmed by MNRF/MECP, prior to the receipt and issuance of permits and authorizations under the Endangered Species Act.

The comprehensive assessment should be structured according to the April 2016 letter, including explicitly addressing the three principles of the Range Management Policy.

Key elements of this comprehensive assessment will need to include;

- Full understanding of project details, schedule and mitigation throughout the life of the project. In addition to the detailed project plan, the comprehensive assessment will need site specific mitigation measures and associated timing of activities from construction through to operations and monitoring.
    - The description of mitigation measures should demonstrate how avoidance was used to select the final footprint.

        - For example, there should be discussion of how the routing was planned to avoid high use areas and explain why a decision was made to impact the area that is being affected.
    - Mitigation measures should include details on how, where and when avoidance windows will be applied.

- The qualitative discussions need to go beyond the baseline characterization and include anticipated impacts from the project. The comprehensive assessment should provide a more contextual description of habitat use and anticipated impacts to recruitment and population trends.

Below are topics of particular importance to include within the comprehensive assessment, the assessment should include, but is not limited to;

- Predicted Permeability and connectivity of the transmission line and associated project infrastructure
- Overlap with existing temporary and permanent disturbances
- Effects on habitat connectivity, arrangement and function on the range and sub-range levels
- Implications to nursery and winter areas as well as the overlapping nursery and winter areas and associated mitigation
- Sensory disturbance
- Mitigation of predator efficiency, restoration, siviculture and monitoring; reclamation of all temporary disturbances
- Consideration of site fidelity, recruitment and population trend
- Appropriate use of collaring data and associated qualitative discussion
- Demonstrate specific application of Best Management Practices and how they will be implemented throughout the life of the project.

This comprehensive assessment should include the most up-to-date project footprint. As a result, Wataynikaneyap should notify MNRF if updated Caribou Screening Tool reports, General Habitat Description mapping products or other information is needed.

Applies to the following IRs:

DEC-MNRF-8	49429	49454	49579	49514
DEC-MNRF-9	49461	49451	49515	49460
49458	49430	49433	49440	49466
49441	49463	49470	49517	49501
DEC-MNRF-11	49523	49505	49511	

Recommended Action #6: A comprehensive assessment of impacts to Eastern Whip per will and proposed mitigation actions for the final project footprint will be provided to MNRF and MECP as a Condition of Approval of the EA and will support permit applications under the Endangered Species Act (ESA).

Eastern Whip per will are a species at risk and the implications to the species and its habitat should be described. This information will be used to support EA conclusions and inform permitting requirements.

Applies to the following IRs:

49569	49562	49528

Recommended Action #7: The following IRs have been adequately addressed or MNRF has already indicated to Wataynikaneyap were previously addressed, and no further action is required as part of the EA.

Additional information may be required to support subsequent permits. Some of the IR responses below indicated that they would be updated in the errata log. MNRF is under the assumption that the Amended EA will be updated to reflect the IR response.

Applies to the following IRs:

49573	DEC-MNRF-14	49465	49564	49520
49534	49500	49572	49538	49532
49457	49504	49570	49568	49449
DEC-MNRF-2	DEC-MNRF-5	49459	DEC-MNRF-12	49493
49445	49450	49540	49498	49474
49484	49473	49502	49580	49559
49541	49563	49544	49556	49509
49577	49488	49486	49487	49479
49480	49481	DEC-MNRF-10	49531	49455
49508	49535	MNRF-COV-05	MNRF-COV-08	MNRF-COV-10
MNRF-COV-12	49499	49527	49526	49548
49428	49536	49507		

Please see the attached table where additional detail is provided for the recommended actions described above.

Thank you,

Londa Mortson
Regional Resources Manager, MNRF

IR #	Topic	Proposed Action #	Proposed Action	Details/comments
49573	EA Methods	7		
DEC-MNRF-7	Surface Water	1 & 3	Include Information Provided in the IR response in the Amended EA	Ensure mitigation measures are commitments in EA
49434	Non-Aboriginal LRU	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	Ongoing discussions with Forest Industry and description of impacts to FMP will be included as part of the Record of Consultation
MNRF-SocioEc-01	Non-Aboriginal LRU	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	Ongoing discussions with Forest Industry and description of impacts to FMP will be included as part of the Record of Consultation
49519	Vegetation	1	Include Information Provided in the IR response in the Amended EA	
49462	Vegetation	2	A correction or update to the information provided	Please update Table 1.6-1 page 1-17 to add reference to Section 21 of the PPCRA and how it may apply to the project.
DEC-MNRF-14	Vegetation	7		
DEC- MNRF-15	Vegetation	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	Commitment for field program to be completed; commitment for pre-construction monitoring, commitment to implement Rare Plant Management Plan, if required
49465	Caribou	7		Assumes Section 9/12 has been updated as indicated
49517	Caribou	3 & 5	Mitigation Measures as an EA commitment	Consideration of Best Management practices must be included in the Caribou analysis.
49564	Caribou	7		
49567	Caribou	3	Mitigation Measures as an EA commitment	MNRF would like to see a commitment to work with MNRF and local forest industry to develop site-specific rehabilitation and reclamation plans
49565	Caribou	1 & 3	Include Information Provided in the IR response in the Amended EA	MNRF would like to see these bullets included as conditions of approval on the EA (ie. To minimize predator efficiency)
49526	Caribou	7		Include Information Provided in the IR response in the Amended EA
49550	Caribou	1	Include Information Provided in the IR response in the Amended EA	Include updated figures in the EA
49548	Caribou	7		Amendment in text
49428	Caribou	7		Include Information Provided in the IR response in the Amended EA
49540	Caribou	7		Update in Errata log
49520	Caribou	7		
49536	Caribou	7		Include Information Provided in the IR response in the Amended EA
49560	Caribou	2	Clarification to be incorporated within the Amended EA.	Please provide rationale and description of how numbers were calculated.
49534	Caribou	7		
49574	Caribou	1	Include Information Provided in the IR response in the Amended EA	
49576	Caribou	2	Clarification to be incorporated within the Amended EA.	Provide description of how calculations were determined.

49500	Caribou	7		Ensure timing restrictions are condition of approval assumes chapter 12 has been updated accordingly
49572	Caribou	7		
DEC-MNRF-8	Caribou	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	
DEC-MNRF-11	Caribou	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	Include site specific description of best management practices to be used
49581	Caribou	1 & 3	Include Information Provided in the IR response in the Amended EA	Include these impact management measures as commitments within EA.
49429	Caribou	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	
49444	Caribou	2	Clarification to be incorporated within the Amended EA.	Clarify how vegetation retention is meant to reduct predator efficiency
49507	Caribou	7		
49454	Caribou	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	Include use of Range Management Policy
49579	Caribou	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	
49511	Caribou	1 & 5	Clarification to be incorporated within the Amended EA.	Analysis to be included in Caribou assessment.
49512	Caribou	1	Include Information Provided in the IR response in the Amended EA	
49514	Caribou	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	Include use of Range Management Policy
49532	Caribou	7		
49547	Caribou	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	Please include timing restrictions as part of the Detailed work plan
49562	Caribou	6	Impact assessment for WPW	
49501	Caribou	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	Please describe BMPs throughout the life of the project.
49482	Caribou	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	Please include timing restrictions as part of the Detailed work plan
49431	Caribou	3	Mitigation Measures as an EA commitment	Monitoring and effectiveness of Reclamation
49549	Caribou	1	Include clarification provided in the IR response in the Amended EA	Ensure approach is clearly stated within the EA
49504	Caribou	7		Assumes Section 9/12 has been updated as indicated
49570	Caribou	7		
49568	Caribou	7		
49569	Caribou	6	Impact assessment for WPW	Describe impact management measures
DEC-MNRF-1	Engagement	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	An updated Record of Consultation be provided to reflect any ongoing discussions
DEC-MNRF-2	Engagement	7		
DEC-MNRF-3	Engagement	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	An updated Record of Consultation be provided to reflect any ongoing discussions
DEC-MNRF-4	Engagement	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	An updated Record of Consultation be provided to reflect any ongoing discussions
DEC-MNRF-5	Engagement	7		
49459	Traditional Resource Use	7		
DEC-MNRF-12	Traditional Resource Use	7		

DEC-MNRF-13	Traditional Resource Use	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	An updated Record of Consultation be provided to reflect any ongoing discussions
49493	Fish	7		Acknowledge that no site specific impact assessment of aquatic resources in the EA. Will be considered at permitting.
49472	Fish	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	Condition of Approval; commitment for mitigation regarding increased access to remote areas
49491	Fish	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	At permitting MNRF will require confirmation of presence/absence of fish species at water crossings; as well as dicussion regarding impacts
49492	Fish	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	At permitting MNRF will require confirmation of presence/absence of fish species at water crossings; as well as dicussion regarding impacts
49494	Fish	1	Include Information Provided in the IR response in the Amended EA	Correct the error in reference and wording
49497	Fish	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	Acknowledges that EA does not assess impacts to the fisheries resource from increased access and fishing pressure. A discussion of opening access to previously unaccessed remote areas is required to understand the impact to fisheries
49496	Fish	3	Mitigation measure identified in IR response as commitment	Ongoing discussions with MNRF to determine setback considering slope conditions
49498	Fish	7		
49474	Fish	7		Assumes section 9/12 have been updated as indicated
49484	Fish	7		Assumes section 9/12 have been updated as indicated
49557	Fish	3	Mitigation measure identified in IR response as commitment	
49473	Fish	7		Assumes section 9/12 have been updated as indicated
49502	Fish	7		
49499	Fish	7		
49527	Wildlife	7		
49528	Wildlife	6	Impact assessment for WPW	
49580	Wildlife	7		
49483	Wildlife	3	Mitigation Measures as an EA commitment	Mitigation or action described in response as an EA Commitment; site specific and reclamation plan as condition of approval
49559	Wildlife	7		assumes section 9/12 have been updated as indicated
49541	Introduction	7		
49546	Introduction	2	A correction or update to the information provided	Edit required in document
49495	Introduction	2	A correction or update to the information provided	Edit required for Inclusion of permits and authorizations
49554	PD Draft	2	A correction or update to the information provided	Edit required in document
49563	PD Draft	7		Assumes section 9/12 have been updated as indicated

49544	ESMP	7		
49556	ESMP	7		Assumes section 9/12 have been updated as indicated
MNRF-COV-07	COV	3	Mitigation Measures as an EA commitment	Prepare and adhere to monitoring plan as described
49561	Wildlife Remaining Part 1	3	Mitigation Measures as an EA commitment	Provide buffers to eagle nests as described in the response
49445	Wildlife Remaining Part 1	7		
49452	Wildlife Remaining Part 1	1	Include Information Provided in the IR response in the Amended EA	
49510	Wildlife Remaining Part 1	2	Clarification to be incorporated within the Amended EA.	Table should be included in the EA as well as a description of how calculations for hectares were determined
49521	Wildlife Remaining Part 1	1	Include Information Provided in the IR response in the Amended EA	
49523	Wildlife Remaining Part 1	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	How potential changes may impact caribou habitat function.
49524	Wildlife Remaining Part 1	1	Include Information Provided in the IR response in the Amended EA	
49525	Wildlife Remaining Part 1	2	Clarification to be incorporated within the Amended EA.	The EA revision should provide an explanation and rationale for why the 50ha scale was selected.
49533	Wildlife Remaining Part 1	1	Include Information Provided in the IR response in the Amended EA	Include updated maps in EA
49558	Wildlife Remaining Part 1	2	Clarification to be incorporated within the Amended EA.	The EA revision should provide an explanation and rationale for why the 50ha scale was selected.
49566	Wildlife Remaining Part 1	1	Include Information Provided in the IR response in the Amended EA	Include text from BMPs and MNRF response
49555	Wildlife Remaining Part 1	1		
49467	Wildlife Remaining Part 2	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	
49476	Wildlife Remaining Part 2	3	Mitigation Measures as an EA commitment	Provide buffers to eagle nests as described in the response
49575	Wildlife Remaining Part 2	2	A correction or update to the information provided	
49471	Wildlife Remaining Part 2	3	Mitigation Measures as an EA commitment	
DEC-MNRF-9	Wildlife Remaining Part 2	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	
49453	Wildlife Remaining Part 2	1	Include Information Provided in the IR response in the Amended EA	
49439	Wildlife Remaining Part 2	1	Include Information Provided in the IR response in the Amended EA	
49461	Wildlife Remaining Part 2	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	Comprehensive assessment of impacts to caribou including mitigation measures
49442	Wildlife Remaining Part 2	1	Include Information Provided in the IR response in the Amended EA	
49451	Wildlife Remaining Part 2	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	
49515	Wildlife Remaining Part 2	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	
49509	Wildlife Remaining Part 2	7		
49577	Wildlife Remaining Part 2	7		
49552	Wildlife Remaining Part 2	1	Include Information Provided in the IR response in the Amended EA	
49475	Wildlife Remaining Part 2	3	Mitigation Measures as an EA commitment	

49488	Wildlife Remaining Part 2	7		Assumes Section 9/12 has been updated as indicated
49486	Wildlife Remaining Part 2	7		
49487	Wildlife Remaining Part 2	7		
49460	Wildlife Remaining Part 2	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	
49571	Wildlife Remaining Part 2	3	Mitigation Measures as an EA commitment	Assumes Section 9/12 has been updated as indicated. EA commitment to include timing restrictions
MNRF-COV-06	Engineering and Design	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	
DEC-MNRF-6	Engineering and Design	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	
49469	Engineering and Design	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	
DEC-MNRF-16	Engineering and Design	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	
49468	Engineering and Design	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	Please provide clarity/rationale for calculations of areas to be cleared
49516	Engineering and Design	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	
49443	Engineering and Design	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	A consultation plan will be required as part of the detailed project plan
49489	Engineering and Design	4	detailed workplan with site location and discussions with forest company	Include final location of laydown yards and resolve conflict with boat launch
49564	Engineering and Design	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	Identify areas where site specific mitigation will apply
49446	PP Routing	3	Mitigation Measure as commitment in the EA	Reduce Limit in the location described in the response
49447	PP Routing	3	Mitigation Measure as commitment in the EA	
49448	PP Routing	1	Include Information Provided in the IR response in the Amended EA	
49449	PP Routing	7		
49456	PP Routing	3	Mitigation Measure as commitment in the EA	
49477	PP Routing	3	Mitigation Measure as commitment in the EA	
49478	PP Routing	3	Mitigation Measure as commitment in the EA	Identify Sloping requirements
49479	PP Routing	7		
49480	PP Routing	7		
49481	PP Routing	7		
49458	Wildlife Part 3	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	
49490	Wildlife Part 3	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	
49470	Wildlife Part 3	1 & 5	Include Information Provided in the IR response in the Amended EA	Discussion of Implications to areas of overlapping nursery and winter areas and associated mitigation will be required in the Caribou analysis
DEC-MNRF-10	Wildlife Part 3	7		
49430	Wildlife Part 3	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	
49433	Wildlife Part 3	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	Commitment to calculate disturbance level

49505	Wildlife Part 3	1 & 5	Include Information Provided in the IR response in the Amended EA	Site level details are needed for Caribou assessment
49440	Wildlife Part 3	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	
49466	Wildlife Part 3	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	
49441	Wildlife Part 3	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	
49463	Wildlife Part 3	5	Prepare a comprehensive assessment of impacts to caribou and caribou habitat	
49578	Wildlife Part 3	1	Include Information Provided in the IR response in the Amended EA	
49530	Wildlife Part 3	3	Mitigation Measures as an EA commitment	Efforts to minimize Sensory Disturbance
49531	Wildlife Part 3	7		
49551	Wildlife Part 3	1	Include Information Provided in the IR response in the Amended EA	
49455	Wildlife Part 3	7		
49539	Wildlife Part 3	1	Include Information Provided in the IR response in the Amended EA	
49508	Wildlife Part 3	7		
49535	Wildlife Part 3	7		
49522	Wildlife Part 3	1	Include Information Provided in the IR response in the Amended EA	
MNRF-COV-01	General	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	
MNRF-COV-02	General	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	
MNRF-COV-03	General	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	
MNRF-COV-05	General	7		
MNRF-COV-08	General	7		
MNRF-COV-09	General	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	
MNRF-COV-10	General	7		
MNRF-COV-11	General	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	A consultation plan will be required as part of the detailed project plan
MNRF-COV-12	General	7		
49464	General	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	
49432	General	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	Conditions of road use strategy and coodination with industry
49516	General	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	
49537	General	1	Include Information Provided in the IR response in the Amended EA	
49538	General	7		
49450	General	7		
49457	General	7		
49503	Groundwater	4	A detailed workplan describing the final project footprint, scope of work, site specific mitigation	