Misipawistik Cree Nation Narrative Response to the Environmental Impact Statement (EIS) submitted by Manitoba Infrastructure Regarding the Proposed Lake Manitoba/Lake St. Martin Outlet Channel

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Environmental Impact Statement response overview

This response by Misipawistik Cree Nation (MCN) to the Environmental Impact Statement (EIS) submitted by Manitoba Infrastructure (the proponent) regarding the Proposed Lake Manitoba/Lake St. Martin Outlet Channel (LMLSMOC) consists of two separate but complementary documents:

- A narrative response which cites key themes and identifies the primary gaps within the EIS (this document). Each high-level concern has a unique alpha-numeric reference that begins with 'MCN'.
- An Excel document that lists all MCN's comments with the EIS referencing both the EIS Guideline and the EIS Reference. Each comment has a unique numeric reference (IR#) that begins with 'MCN' and is followed by the chapter number and comment number.

This response draws on the expertise of the following organizations and individuals:

- MCN Lands and Waters staff
- MCN Guardians
- MCN Fishermen
- Coldstream Ecology
- Halket Environmental Consultants
- KEM Consulting
- Rootstalk Resources

Background on Misipawistik Cree Nation

Misipawistik Cree Nation (MCN) is located in Treaty 5 Territory between Cedar Lake and Lake Winnipeg. The Cree people have occupied MCN and their traditional territory since time immemorial and know it to be Nitaskinan (our land). Cree culture and language reveal the relationships between our people, our territory, and our world, and are the foundations of our nationhood.

MCN reserve land is 1852.30 hectare, with additional traditional territory and traplines in the surrounding area. MCN has a membership of 2100 and governance includes a Chief and three councillors.

Within or adjacent to the traditional territory of MCN are several ecologically important areas:

- Long Point Ecological Reserve (Eastern white cedar)

- Walter Cook Special Conservation Area (piping plover nesting)
- Walter Cook Caves Ecological Reserve (little brown bat hibernacula)
- Karst Landscape Area of Special Interest (karst geography)
- The north-western shore of Lake Winnipeg (fish spawning rivers)
- Little Limestone Lake Provincial Park (outstanding global example of a marl lake)
- Kaweenakumik Islands Ecological Reserve (nesting birds)
- Summerberry Marsh Proposed Wildlife Management Area (important bird area)
- Chitek Lake Provincial Park (ranges of five major ungulates overlap)

Additionally, the area contains migratory and breeding grounds for moose, caribou, and several other species.

This land is the traditional territory of the people of MCN and this relationship is the foundation of our culture, language and wellbeing. The area is part of the boreal plains ecozone, mid-boreal lowlands ecoregion and known as Manitoba Lowlands (unrepresented) in the national parks system. The boreal forest is part of the largest last intact forest system in the world and contributes to carbon sequestration and critical habitat for northern birds, fish and mammals, such as moose and caribou.

Fishing industry and potential impacts

Fishing is fundamental to the MCN way of life. MCN has over 90 commercial fishers who each employ staff, and fishing is the single most important economic activity in the community, generating $1 million in sales each year. The community is dependent on this income as a way to sustain its people.

In 2011 and 2014, during the operation of the emergency outlet channels (EOC), the fishers in MCN observed significant changes to fishing conditions in their traditional waters. These include, but are not limited to:

- Changes in the flow of the water, particularly around Long Point, a traditional fishing area
- Increased debris in the water
- Decrease in whitefish in the Gull Bay area since the operation of the EOC
- Impacted water quality in near-shore water, resulting in fish moving to deeper areas of the lake
- Changes in turbidity and flow patterns in the winter fishing season

The fishers are concerned that the new channel will permanently impact the size and location of pickerel (walleye) and whitefish populations. Particularly, they are concerned the access that the fish have to the spawning grounds in Lake St. Martin will be limited, and that the flows of the lake will negatively affect the fish populations.

MCN is concerned the construction and operation of the channel will have a serious impact on the flows and aquatic health in the northern basin of Lake Winnipeg, and want to ensure for the long-term health of this lake and their way of life, both of which face many challenges.

Impacts to Indigenous Health

In addition to the commercial fishing, the MCN people have a spiritual and cultural connection to the waters and view fishing as one of the key ways in which they exercise and maintain their traditional way of life and their spiritual relationship with the water and land. In this sense, fishing as a way to maintain their language and culture, and a method to foster relationships across generations of their people. Importantly, given that relationships with land (including water) is long established as a core determinant of Indigenous health, it is important to recognize that this project is also likely to impact the cultural and spiritual well-being of all Indigenous nations, including MCN, listed by CEAA as 'most-impacted'. As such, understanding the potential impacts to Indigenous health extends far beyond a socio-economic understanding related to livelihoods and local economies, although these are also significant. The proponent's assessment fails to consider these cultural-spiritual impacts to MCN health – and fails to consider well-established and globally recognized Indigenous determinants of health in their EIS – a shortcoming that could have been avoided had they adequately and respectfully consulted with MCN as required.

Indigenous engagement process

MCN has a positive relationship with many departments of the provincial and federal governments. As they actively work towards Nation re-building and improving the health and well-being of their members, MCN has partnered with these departments in areas such as environment, health, and social services. Just as MCN follows protocols and agreements that allow these partnerships to be successful, they expect that the proponent in this project acknowledges and honours the policy and protocols outlined in Manitoba's *Bill 18: Path to Reconciliation Act* and the rights outlined in the federal *Section 35* of the *Constitution Act*. They would also hope that the proponent would be guided by the calls to action set up in the *Truth and Reconciliation Commission* and the principles set out in the *United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).*

Unfortunately, MCN has not been engaged by the proponent using these frameworks. The EIS, as submitted, demonstrates a significant lack of engagement and consultation, a lack of understanding of Indigenous rights, a lack of appropriate methodology, and a stark failure to comply with guidelines clearly expressed by CEAA at the outset. Unfortunately, these gaps undermine the validity and legitimacy of every aspect of the EIS that requires Indigenous engagement and consultation. These gaps touch on nearly every feature of the EIS including the determination of spatial and temporal boundaries, development of valued components, residual effects, cumulative effects, significance of effects, and prediction confidence in all impact areas. Given this, it is unclear how the EIS as submitted can be judged as meeting the initial standards for conformity outlined by CEAA or how the EA process can proceed without conducting significant research and engagement to address these shortcomings.

Concerns and gaps

The MCN review team conducted a thorough review of the EIS with a particular focus on the following sections:

- 2.4 Alternative Means of Carrying out the Project

- 3.4 Project Components
- 4.4 Scoping Assessment
- 4.5 Effects Assessment
- 5.3 Indigenous Engagements and Consultation
- 6.4 Groundwater and Surface Water
- 7.2 Fish and Fish Habitat
- 8.3 Wildlife
- 10.2 Assessment of Potential Effects on Traditional Land and Resource Use
- 10.3 Indigenous Health and Socio-Economic Conditions
- 10.4 Aboriginal and Treaty Rights
- 11.0 Cumulative Effects
- 11.13 Indigenous Health and Socio-Economic Conditions
- 11.14 Aboriginal and Treaty Rights

Detailed analysis of these sections with specific comments can be found in the Excel document. However, MCN wanted to use this overview document to address high-level concerns and gaps that are found within each of these sections. Many of these concerns address the process concerns in the area of engagement that the proponent has either failed to undertake or the proponent has insufficiently undertaken. It is also noted that in many cases, the proponent has failed to adhere to the work laid out in the "Guidelines for the Preparation of an Environmental Impact Statement" document.

MCN and its team of experts believe the EIS, as currently submitted, does not address the fundamental responsibilities that Manitoba has to Indigenous Nations, and must address both the concerns in the table below and the more specific concerns outlined in the MCN Excel review table before moving forward with the construction and operation of the outlet channels.

Chapter or section reference	Concern	Proponent must…
Alternative Means of Carrying out the Project (2.4)	**MCN 1A** **The analysis of "alternatives means to carry out the project" is insufficient.** The analysis of "alternatives means to carry out the project" (KGS, 2016) does not account for the benefits that would accrue to alternative projects that store water on the prairies. Water stored on the prairies has a huge value to agriculture and the natural environment. The value of the water stored by the alternative projects was not taken into account in the analysis. If it had been, it would probably show that the diversion channels were perhaps not the most viable economic alternative. There is no assessment in the analysis of the coupling a few of the alternative projects together to combat flooding. All alternative projects were considered on a one-off basis. Considering smaller versions of the alternative projects coupled together would provide solutions to the flooding of the Lake St. Martin and Lake Manitoba communities that were not examined. There are no substantive assessments of the impact of the alternative projects on the environment. Because of these flaws, the analysis of "alternative means to carry out the project" is incomplete.	Complete a thorough analysis of "alternatives means to carry out the project", that includes comprehensive analyses of the environmental and social benefits and impacts of all viable options for flood mitigation including combining the projects at smaller scales.

Chapter or section reference	Concern	Proponent must…
Project Components (3.4)	**MCN 2A** **The analysis and modeling used in the Lake St. Martin Outlet Channel (LSMOC) and its environs is insufficient to determine potential impacts.** There is hydrological information and bathymetry available for Sturgeon Bay. However, this information has not been used to develop an analysis of how the geomorphology and sediment assemblages in the Bay will change as a result of the outflows from the LSMOC.	Increase the analysis and modeling of the LSMOC and environs to sufficiently demonstrate the potential hydrodynamics, sediment transport and morphological evolution of the bed sediments in Sturgeon Bay and implications of this evolution on water quality and fishery.
Operation of the channels (3.5.3, 3.7.3)	**MCN 3A** **The "Operating Rules" for the outlet channels must be co-created and managed with the First Nations to ensure for consistent and responsible use.** The project is being built so that it can operate year-round, independent of flood conditions. MCN is concerned that the proponent or its partners can change the Operating Rules (Appendix 6J) to year-round operation once the project is approved. The version of the Operating Rules was developed by MI without consultation with First Nations.	Meaningfully engage with all potentially impacted First Nations on the reason for and the implications of this change to the design of the channels. Develop co-management operating rules for the diversion channels that take into account First Nation concerns.
Identification of Assessment Boundaries (4.4.3)	**MCN 4A** **The spatial scale determined by the proponent is insufficient and does not represent the potentially impacted areas.** All the experts on the MCN review team expressed significant concern about the lack of Indigenous consultation on the development of spatial scale (PDA, LAA = 1 km buffer around the PDA, and RAA = 12 km buffer around the PDA) that is described in the EIS. The lived-experience of Indigenous peoples regarding the use of the emergency outlet channel (EOC) is not reflected in the EIS (see Concern #10 for further information), and the considerations of how the outlet channels might impact the fisheries of Lake Manitoba as a result of changed flow is not represented in the current special scale. While the aquatic RAA is stated as extending "to include the entirety of Lake Manitoba and the	Ensure that the special scale of impact is expanded to include all potentially impacted First Nations. The proponent must include First Nations in the discussion of the appropriate size of the special scale using appropriate

Chapter or section reference	Concern	Proponent must…
	entirety of the north basin of Lake Winnipeg", the report does very little to demonstrate the impact to the fish and people in this extended range. Additionally, the Proponent examined impacts to all wildlife "valued components" at the same spatial scale. The RAA buffer is based on the home range size for non-migratory moose. This spatial scale is inappropriately applied to other wildlife "valued components" considered in the EIS, and specifically, waterbirds. Waterbirds are arguably more dependent on aquatic environments than terrestrial and impacts to these species should be considered at the same spatial scale as is used in the aquatic component of the assessment, which extends to the entire North Basin of Lake Winnipeg and includes all of Lake Manitoba and Lake St. Martin, and connected rivers, creeks, and wetlands. As noted in our line-item comments, the justification for using this spatial scale is not supported by the literature: Benitiz-Lopez et al. (2010) is an inappropriate citation for determining the appropriate spatial scale of impacts to waterbirds because the study did not consider non-terrestrial habitats in the analysis.	engagement methods.
Indigenous Engagement and Consultation (5.3)	**MCN 5A** **Level of consultation does not meet the CEAA guidelines requirements.** CEAA guidelines clearly state that spatial boundaries and impacts to TLRU must be determined via engagement with the communities listed. The proponent has imposed spatial boundaries and TLRU assumptions without consulting with the Indigenous communities that they were explicitly required to. The Proponent only conducted meaningful engagement activities with less than 1/3 of the communities that it was required to, and less than 1/2 of those identified by CEAA as 'most impacted' (see Chapter 5 and Appendix 5C). Of the 39 communities that require Crown consultation, 27 of which are identified by CEAA as 'most impacted' the proponent has committed to engaging in consultation with only 31 of them and notes 'frequent engagement' with only 12 communities. The proponent's consultation report shows that they have ignored CEAA's guidelines and has determined that they will decide on who should be more or less impacted based on proximity to previously determined spatial boundaries and MI's understandings of TLRU in these areas. The proponent does not have the baseline data to substantiate these claims.	Meaningfully engage with all potentially impacted First Nations to develop realistic and informed spatial boundaries.
	MCN 5B **The method of engagement used by the proponent with Indigenous communities is flawed.** There is a conflation in the proponent's methods between 'public engagement' and 'Crown consultation' with Indigenous peoples. Open houses and group meetings, that meet the standard of public meetings, cannot qualify as legitimate consultation with Indigenous peoples as they do not follow appropriate methodologies outlined by CEAA for acquiring and managing Indigenous knowledge as data. This key point is demonstrated by Nations choosing to not divulge certain aspects of TLRU and by Nations deciding to withdraw from the proponent's consultation due to flawed methods (see EIS Chapter 5 and Appendix 5C). Any such method can only be legitimated if this method was arrived at via preliminary consultation and direction from the	Develop and execute a comprehensive engagement plan that follows CEAA requirements and the protocols as dictated in Section 35 legislation.

Chapter or section reference	Concern	Proponent must…
	specific nation that such methods are meant to include. **This preliminary consultation was not conducted with MCN nor was it conducted with many of the nations designated as 'most impacted'.** As such, in addition to a failure to engage and consult with required nations, the data that the proponent did collect in such public meetings – especially data related to TLRU – must be deemed invalid and incomplete.	
	MCN 5C **The proponent did not conduct sufficient Indigenous engagement prior to the submission of the EIS as stated in the CEAA guidelines.** The CEAA guidelines clearly express that engagement for all aspects of the EIS (eg: determining spatial boundaries, determining significance of impacts, determining mitigation and follow-up programs) must be conducted prior to submission of the EIS and that **this kind of engagement must be preceded by engagement to decide on process/protocol**. The proponent has provided a consultation protocol that indicates a 'Phase 1' for initial engagement but has either not conducted this engagement with several nations or has deemed it unnecessary for reasons noted above. Although the proponent notes in numerous instances that further engagement will provide data to be incorporated as project progresses, this **violates the guidelines provided by CEAA and contradicts the purpose of consultation and engagement as an essential process in the determination of whether a project will be approved**. As noted in the EIS table provided, MI must acknowledge and be guided by an understanding that engagement/consultation is a *prerequisite* for potential approval.	Complete all required engagement and integrate the findings and decisions into the EIS. Only then can the EIS be considered complete and valid.
Groundwater and Surface Water (6.4)	**MCN 6A** **There is insufficient modeling to demonstrate the impacts of changes to water flows as a result of the diversion channels.** Although information on water levels and flows for the pre-project conditions and predictions for post-project are provided based on past hydrology, along with meteorological information and groundwater information, this information has not been used to create models that could be used to predict the changes to the environment caused by the project. This lack of modelling has led to unconvincing qualitative predictions of future effects. Models must be created to understand the effects of the project on the physical environment. These models must include: • Water balance model for the carbonate aquifer adjacent to and underlying the project. • Water balance model for Lake Manitoba and Lake St. Martin to provide predictions on annual water balance parameters (inflow, outflow, precipitation, evaporation, groundwater flux) for pre-project and future project conditions based on climate change scenarios • Hydrodynamic, scour and sediment transport and plume models for the outlets of the LMOC and Fairford River and for the LSMOC and Dauphin River	Undertake studies to complete all of the modelling necessary to assess the potential impacts to MCN and the other north basin communities on Lake St Martin and Lake Winnipeg.

Chapter or section reference	Concern	Proponent must…
	The potential impact of flows into Sturgeon Bay is of particular concern to MCN. In 2011 the fishermen observed significant changes to the location and populations of fish. Accounts state that fishermen were not able to find the locations of fish and some were unable to meet their quotas. Fishing is one of key economic drivers in MCN, and any long-term changes to flows, and habitats that affect spawning areas, or otherwise adversely affect fish, would devastate this community.	
Assessment of Potential Effects on Aquatic Environment (7.0)	**MCN 7A** **The evidence presented regarding habitat connectivity is not conclusive.** The description of fish communities and fish habitats in the EIS make it clear that there is considerable movement among Lake Manitoba, Lake St. Martin, and Lake Winnipeg by a diversity of aquatic species. When operational, the new outlet channels will profoundly change habitat connectivity, with most movement of fish now occurring unidirectionally (downstream); this is particularly important to the LSMOC because no upstream fish passage is planned for the channel. Lake St. Martin is an important spawning habitat for Lake Winnipeg's lake whitefish and walleye populations (and likely other species not examined as "valued components" in this analysis). The LSMOC will create significant attraction flows but no way for the fish to access Lake St. Martin through the channel. Even if the attracted fish are able to make their way back to the Dauphin River to migrate to Lake St. Martin, there are likely to be major physiological/energetic consequences to the additional effort these fish expend as the attempt to circumnavigate the LSMOC. The analysis does not consider the costs or consequences to individual fish health or population demographics and assumes that it is negligible. Spawning migrations are energetically costly and fish typically make them when they are physiologically compromised because they are disproportionately investing their resources into gamete development. It is not safe to assume that there are no costs/consequences to the affected individuals; moreover, these costs will ultimately scale-up to the population level and impact productivity.	Undertake increase study and develop a robust mitigation plan to ensure the health and population of the fish are not compromised as result of altered migration and spawning habitats.
Fish and Fish Habitat (7.2)	**MCN 8A** **Studies on the impact of high flows on fish habitats and spawning areas are insufficient.** During high flows, major increases in the quantity of water that move though Lake St. Martin are likely to profoundly impact aquatic habitat productivity. This issue has not been sufficiently studied and is not addressed in the EIS. Also, there are likely to be impacts to water quality/chemistry, particularly in Lake St. Martin and Sturgeon Bay, as a result of channel construction and operational impacts on groundwater dynamics, which are not discussed (see section on Ground and Surface Water). From a biological diversity perspective, the impacts of changing flow regimes and connectivity may be profound for all of the considered "valued component" species because, as the EIS suggests, there are distinct populations of fish present in the RAA that use discrete geographical/ecological regions of the lakes/rivers. Thus, lost	Conduct studies and create modelling based on flow in collaboration with the First Nations in the north basin of Lake Winnipeg.

Chapter or section reference	Concern	Proponent must…
	productivity/biodiversity cannot necessarily be compensated for by production in other areas of the lake.	
	MCN 8B **Data analysis of fish population and abundance data during the operation of the EOC is insufficient.** Limited assessment is provided of existing fish population/abundance data or fishery catches and trends in relation to the Lake St. Martin emergency outlet channel's construction and operation, despite its relevance to an impact assessment of the proposed LSMOC. In general, the EIS does a poor job of using data collected during EOC operations to advise on potential impacts from future channel construction and operations.	Undertake increased analysis of the impact of the EOC on flow and fish populations to inform potential long-term impacts of the outlet channels and mitigation plans.
	MCN 8C **Analysis of potential impacts to commercial and CRA fisheries by community is insufficient.** The proponent provides no evaluation of impacts to CRA fisheries from outlet channel operations or consideration of differences that may be experienced among the region's First Nation's communities from changes to fish abundances and distributions. Some communities and their fisheries may be more adversely affected by changes in fish distributions and abundances than others. The proponent's assessment of impacts to fisheries is limited to a general overview of commercial fish catches in Lake Winnipeg and Lake St. Martin and deliveries of fish to the Dauphin River Fish Plant, provided by MSD.	Pursue additional analysis that examine potential impacts to commercial and CRA fisheries, by community, and which integrates information and concerns obtained via consultation with those communities.
	MCN 8D **Quantitative analysis related to the impact of operation of the outlet channels on fisheries and ecosystem is insufficient and does not provide enough prediction confidence to safely move ahead with the construction.** Determinations throughout the EIS are of "no significant effect" of project construction or operations/maintenance to aquatic ecosystems. However, there are several issues that preclude confidence in impact determination. The only quantitative assessment provided in Chapter 7, the Aquatic Ecosystem chapter, is of area directly affected by excavation of the inlet and outlet channels. No hydrological modeling has been completed and therefore the proponent is unable to quantify impacts to aquatic habitats outside of the PDA. For instance, the proponent is largely unable to quantitatively predict how changes in flows, groundwater levels, surface water inputs, or sediment transport within and between lakes, rivers, and wetlands, etc. will affect fish populations and aquatic habitats in the LAA or RAA.	Undertake studies that inform a detailed quantitative analysis related to the impact of outlet operation on fisheries and ecosystem within a spatial area determined in consultation with First Nations.
	MCN 8E **The proponent fails to provide a detailed, quantitative description of baseline aquatic/fish habitat conditions as required in the EIS Guidelines.** Hence, confidence in this impact assessment should be considered extremely low.	Ensure the detailed quantitative analysis meets the EIS guidelines

Chapter or section reference	Concern	Proponent must…
	MCN 8F **The proposed plan for offsetting habitat loss is not viable.** The proponent suggests throughout the EIS that habitat lost will be "more than offset" by the construction of aquatic habitat within the outlet channels. This is problematic for several reasons: • The channel area (172ha) is not equivalent to excavated area (177ha); • As designed, the channels will, at best, provide low complexity, low quality habitat that is not equivalent to what is being lost. In fact, within the EIS's Hydrology Chapter (Volume 2, P6.191), the utility of the outlet channels for aquatic organisms is described as follows, "However, the channels will be constructed, operated and maintained as hydraulic channels for the purpose of managing flows and lake levels, not as natural rivers. The channel design will provide for downstream fish passage, but the channels are hardened to prevent erosion, and they are not designed to mimic a natural riverine system with ecological functions." • The utility of the channels to native fish species and other aquatic organisms is thus unclear and largely unaddressed in the EIS to support channel role in habitat mitigation. • The proponent has not completed a quantitative evaluation of impacts to aquatic habitats outside of the PDA and thus actual habitat "offsetting" requirements are not known.	Address what kind of design features are suitable for what fish/wildlife species, realistic timeframes to reach useable habitat condition, and how much aquatic production is anticipated to be supported within the channels.
	MCN 8G **Predictions of impacts to fish productions are based on faulty logic.** The proponent states that because lost/altered habitat (from excavation of the channels) is not unique, any impacts to fish production will be compensated for by production in other parts of the lake (i.e. within similar habitats). This assessment makes little sense and appears to be based on faulty logic. Habitat will be lost and is not being replaced by equivalent habitat; thus, aquatic productivity will be affected. Simply stating that these organisms will move elsewhere does not consider the cumulative impacts of this project to already-suffered habitat loss/reductions in habitat quality and associated shifts in aquatic ecosystem productivity/population dynamics within the RAA.	Create a mitigation plan demonstrating how lost habitat will be replaced.
Assessment of Potential Effects on Traditional Land and Resource Use (10.2)	**MCN 9A** **Assessments related to TLRU fall significantly short of CEAA guidelines, especially with respect to engagement with Indigenous nations and integration of Indigenous Knowledge:** In general, the assessment of Potential Effects on TLRU falls significantly short of the requirements outlined in the CEAA guidelines. These shortcomings are fundamentally related to significant lack of consultation (lack of consultation with many Indigenous nations, poor consultation when conducted, no consultation with MCN whatsoever), collection of primary data, integration of Indigenous Knowledge, and general lack of baseline research.	Respectfully engage with MCN to facilitate conducting TLRU studies related to the proposed project, to develop appropriate methods/protocols related to conducting TLRU studies, and to

Chapter or section reference	Concern	Proponent must…
	Failing to conduct the requisite underlying research and consultation with MCN and other nations identified as most impacted invalidates the conclusions drawn which must rely on this primary data. The shortcomings apply to both the assessments of Effects on TLRU (chapter 10 of EIS) and cumulative effects on TLRU (Chapter 11 of EIS). Specific instances are outlined within the accompanying EIS review table (excel document) and impact all aspects of TLRU assessment that are to be determined by conducting TLRU studies with impacted Indigenous nations including: • Determination of spatial boundaries • Determination of temporal boundaries • Determination of residual effects • Determination of mitigation strategies • Determination of existing conditions for TLRU • Determination of significance of predicted impacts • Determination of prediction confidence	integrate Indigenous knowledge into all aspects of the EIS related to TLRU. All engagement that relates to Indigenous knowledge must comply with CEAA guidelines regarding appropriate respectful and collaborative collection and management of such data.
Indigenous Health and Socio-Economic Conditions (10.3, 11.13)	**MCN 10A** **The EIS demonstrates a poor understanding of Indigenous determinants of health, and does not adequately acknowledge or address the health impacts as a result of the EOC or the ongoing health impacts of the current outlet channel process.** The EIS, as submitted, demonstrates an extremely limited understanding of issues related to Indigenous determinants of health such as relationships with land (including water), environmental dispossession, experiences of colonialism, cultural discontinuity, and racism. These key determinants of Indigenous health are well-established and documented – both in Manitoba-specific peer-reviewed literature and globally (examples of relevant literature are given in the accompanying EIS table). The proponent has failed to engage with potentially impacted Indigenous nations regarding impacts to Indigenous health, has failed to adequately consult the relevant literature and existing research on the determinants of Indigenous health directly relevant to this project, and has misrepresented the existing research that they do cite in the EIS. Specifically, the single report cited with respect to Lake St. Martin and Indigenous mental health suggests that the flooding itself was the cause of negative mental health impacts and, therefore, that building outlet channels would improve mental health. This logic and conclusion are misleading and ignore peer-reviewed literature regarding the impacts of the 2011 flood and the interactions related to the Indigenous determinants of health mentioned above. The proponent's representation of negative mental health impacts due to the 2011 flood misrepresents the actual account which demonstrates that being subject to colonial processes, being left out of consultation regarding projects that impact Indigenous peoples' environments, and subsequent disruption of relationships with land and culture are the key features responsible for negative health impacts. In this regard, it is extremely significant to recognize that this EA process itself, as	Work closely with Indigenous Nations to understand the impacts of the EOC on overall Indigenous health. Create a plan that addresses the negative health impacts that may occur as a result of the construction of the permanent outlet channels. The proponent is required to utilize an Indigenous determinants of health framework as a baseline for assessment of impacts to Indigenous health. This framework must include consideration of cultural and spiritual

Chapter or section reference	Concern	Proponent must…
	conducted so far, and the proponent's failure to engage and consult in good faith with many nations potentially impacted by this proposed project, is reproducing the factors that impact negatively on Indigenous health. Importantly, given that relationships with land (including water) is long established as a core determinant of Indigenous health, it is important to recognize that this project is also likely to impact the cultural and spiritual well-being of all Indigenous nations, including MCN, listed by CEAA as 'most-impacted'. MCN has a spiritual and cultural connection to the waters in around their territory (including Lake Winnipeg) and, as stated in MCN's land code, their traditional teachings speak of their obligation to care for and respect the land. As such, understanding the potential impacts to Indigenous health extends far beyond a socio-economic understanding related to livelihoods and local economies, although these are also significant. MI's assessment fails to consider these cultural-spiritual impacts to MCN health – a shortcoming that could have been avoided had they adequately and respectfully consulted with MCN as required.	relationships with land (including water) and be modified as/if appropriate following respectful consultation with MCN according to CEAA guidelines and those outlines in the TRC calls to Action and UNDRIP.
Aboriginal and Treaty Rights (10.4, 11.14)	**MCN 11A** **The EIS, as submitted, fails to acknowledge that the policy and legislative framework relating to Indigenous peoples extends beyond Aboriginal and Treaty Rights and includes Manitoba's *Bill 18: Path to Reconciliation Act*.** This act affirms that "the Government of Manitoba is committed to reconciliation and will be guided by the calls to action of the Truth and Reconciliation Commission and the principles set out in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)". There are numerous articles within UNDRIP and the TRC that will apply to processes like the EIS, not the least of which is UNDRIP Article 19 that requires states to consult and cooperate in good faith to obtain free, prior, and informed consent before adopting any measure that may impact Indigenous rights.	Consult and cooperate in good faith to obtain free, prior, and informed consent before adopting any measure that may impact Indigenous rights
Cumulative Effects (11.0)	**MCN 12A** **The cumulative effects analysis is insufficient.** By definition a cumulative effects analysis is supposed to consider changes to the environment due to the project combined with the existence of other past, present and reasonably foreseeable physical activities. The CEA ignores the effects of two of the largest physical activities currently active, namely the Portage Diversion and Lake Winnipeg Regulation. • Water levels and water quality conditions in Lake Manitoba are affected by inflow of flood waters from the Portage Diversion. It is this project that has caused the need for flood protection for Lake St. Martin. • Lake Winnipeg Regulation has transformed the natural regime of the Lake into that of a storage reservoir changing water levels and water quality.	Complete a comprehensive cumulative effects analysis that takes into account the effect of the diversion channels combined with the Portage Diversion and Lake Winnipeg Regulation.

Conclusions

As demonstrated in this submission, MCN has significant concerns regarding the overall validity of the EIS, and has outlined dozens of gaps or areas of concern. MCN feels that these gaps and concerns must be addressed through a revised process which includes:

- A full Indigenous engagement process that follows the protocols laid out in Manitoba's *Bill 18: Path to Reconciliation*, and Section 35 of the *Constitution Act*
- Consultation with Indigenous Nations regarding the potential impacts of the construction and operation of the outlet channels, using a combination of western science and traditional ecological knowledge
- Co-development of operational and mitigation plans for all aspects of the channel; and complete studies of the potential impacts to the aquatic and terrestrial landscapes, especially those that might infringe on Aboriginal and Treaty Rights.

MCN would be pleased to engage in this process with the proponent and looks forward to the response from both CEAA and the Manitoba government.