

LAKE MANITOBA LAKE ST. MARTIN

OUTLET CHANNELS PROJECT PROGRESS REPORT JULY 2020

Project Overview

In 2011, southern Manitoba experienced widespread flooding and Lake Manitoba experienced high inflows through the Waterhen River, Whitemud River, and the Portage Diversion.

Construction of the Lake Manitoba and Lake St. Martin Outlet Channels Project will enhance flood protection to surrounding area, and help to strengthen Manitoba's

existing network of flood mitigation infrastructure. The outlet channels will:

- Improve water regulation of Lake Manitoba and Lake St. Martin
- Reduce the likelihood of flooding on both lakes
- Lower the risk of flood related damages and disruption to communities in the area

Lake Manitoba Outlet Channel

The Lake Manitoba outlet channel will result in a greater ability to maintain water levels below the flood stage.

Project details include:

- Designed to support flows of 7,500 cfs (212 cms)
- A diversion channel, approximately 24.1 km long, connecting Watchorn Bay on Lake Manitoba to Birch Bay on Lake St. Martin
- Combined bridge and water control structure at Iverson Road
- Bridge Locations
 - PTH 6
 - Carne Ridge Road
 - Township Line Road
- PR 239 realignment (currently privately held land & existing municipal road alignments)

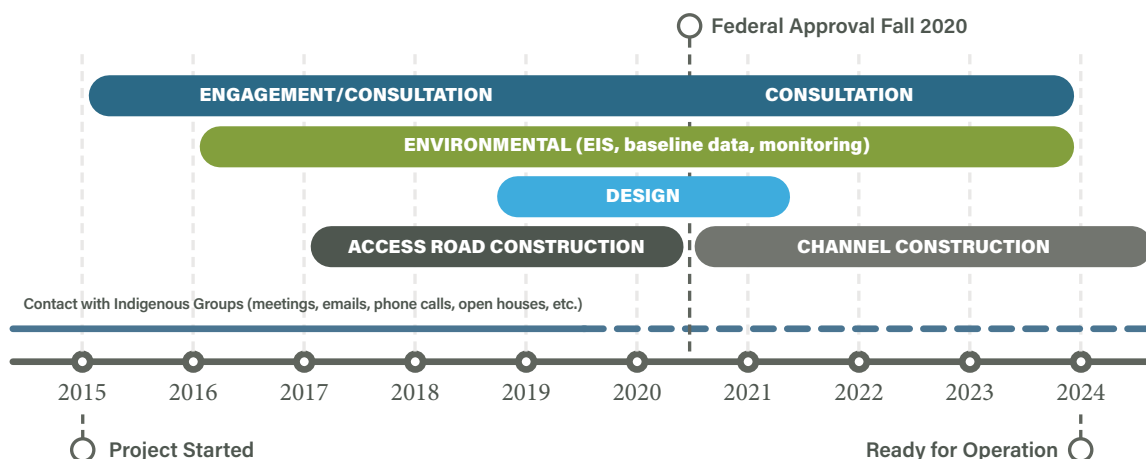
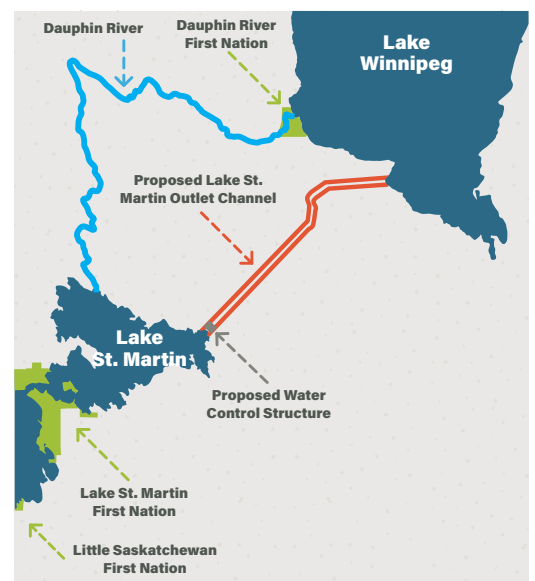


Lake St. Martin Outlet Channel

The Lake St. Martin outlet channel will result in a greater ability to maintain water levels below the flood stage.

Project details include:

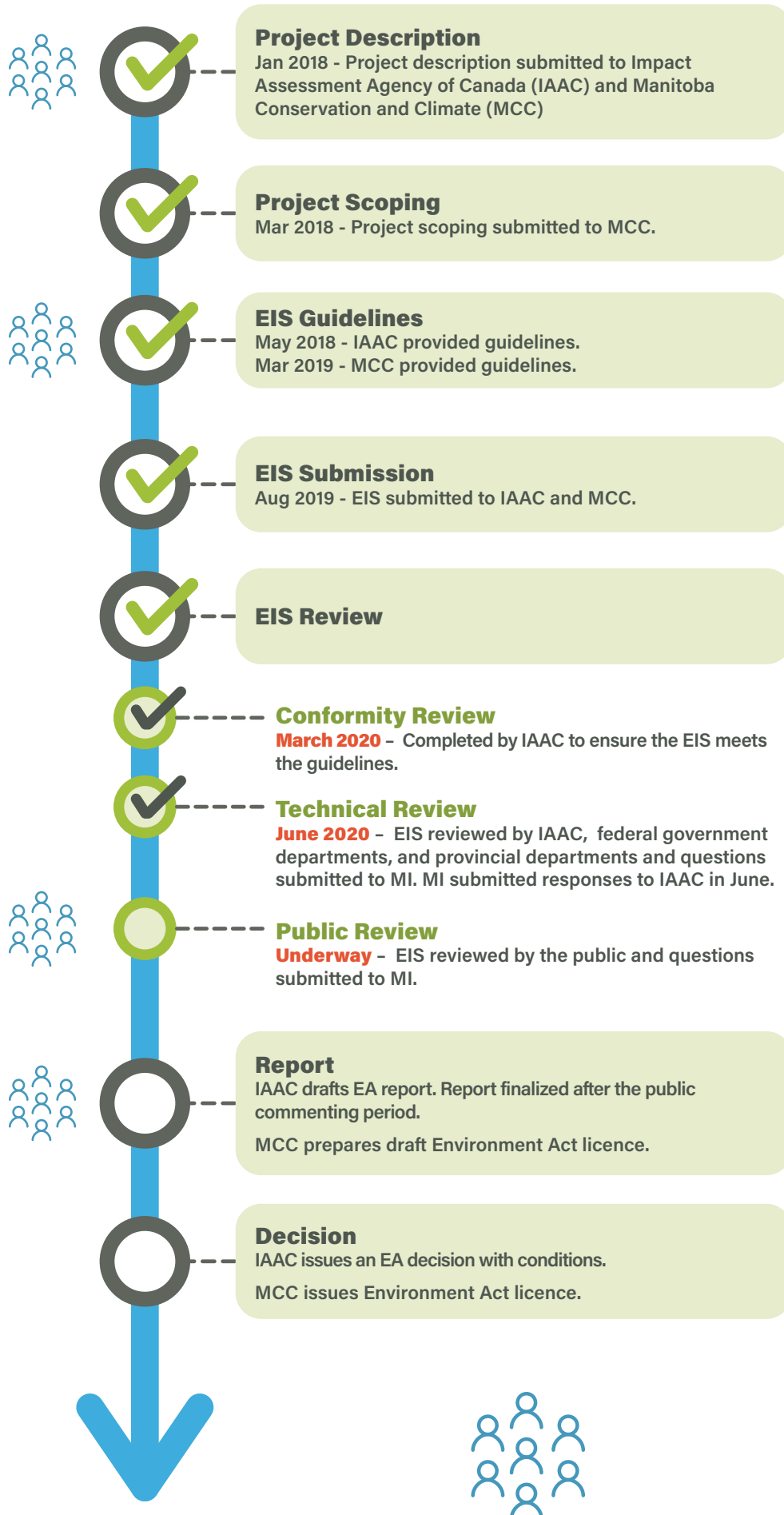
- Designed to support flows of 11,500 cfs (326 cfs)
- A diversion channel, approximately 23.8 km long
- A channel inlet positioned at the east end of Lake St. Martin and outlet near Willow Point in Sturgeon Bay of Lake Winnipeg
- Construction of a water control structure near the channel inlet
- Several drop structures
- Hydro distribution line to power control structure



Environmental Assessment

An environmental assessment (EA) is required by federal and provincial law under:

- The Canadian Environmental Assessment Act, 2012
- The Environment Act



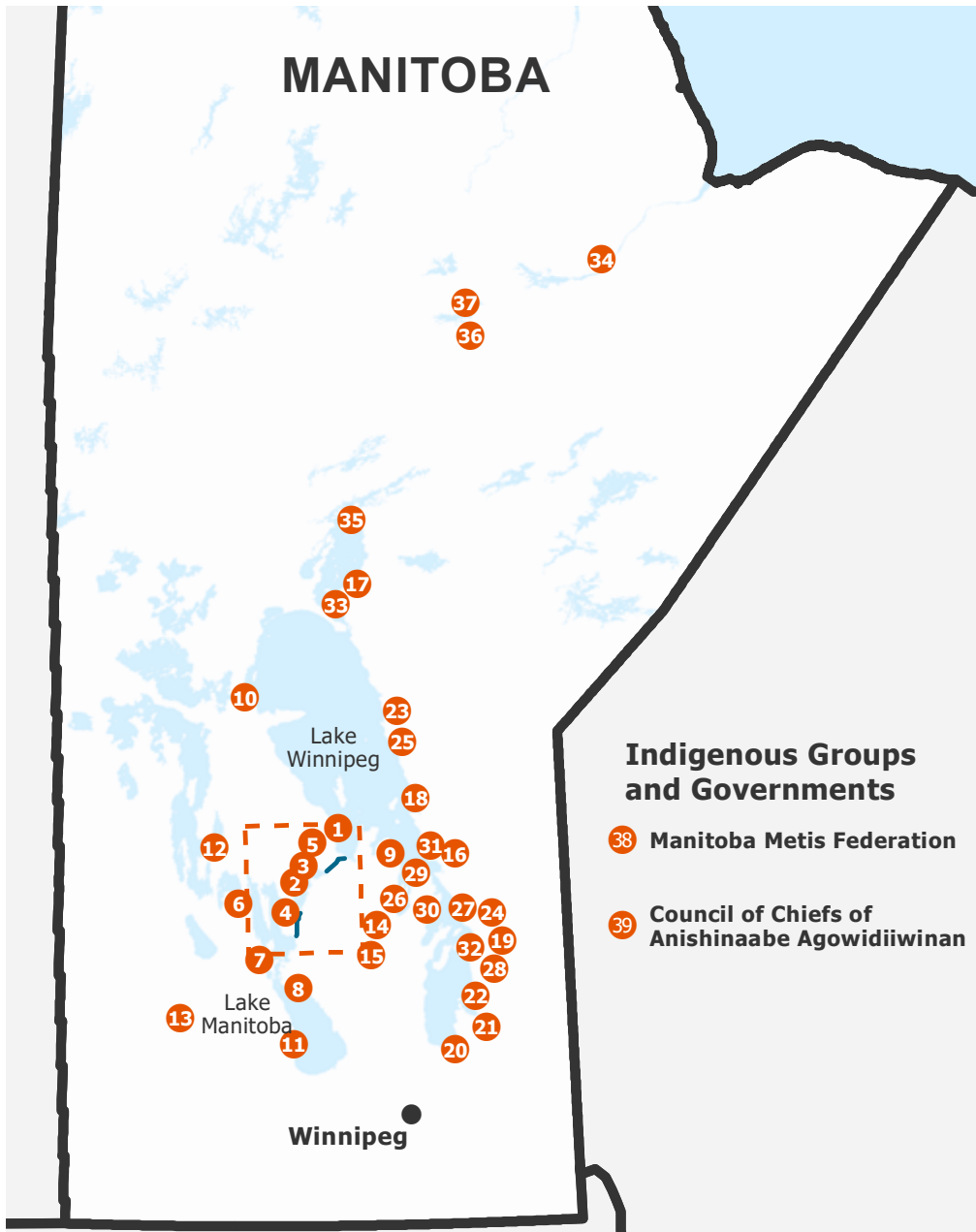
Public and Indigenous commenting occurs throughout. A Technical Advisory Group (TAG) also provides feedback during the environmental assessment process. The TAG consists of 70 + persons representing Indigenous communities, RM of Grahamdale, and Indigenous commercial fishers.

Consultation

Manitoba has a legal duty to consult with First Nations, Métis communities and other Indigenous communities if there is any possibility that the exercise of Aboriginal or Treaty Rights may be adversely affected by a proposed

decision or action. The process is defined in the *Interim Provincial Policy for Crown Consultations with First Nations, Métis Communities and other Aboriginal Communities*.

PROVINCIAL ENGAGEMENT AND CROWN CONSULTATION



- LAKE ST. MARTIN COMMUNITIES:**
1. Dauphin River First Nation
 2. Lake St. Martin First Nation
 3. Little Saskatchewan First Nation
 4. Pinaymootang First Nation
 5. Dauphin River NAC
- LAKE MANITOBA COMMUNITIES:**
6. O-Chi-Chak-Ko-Sipi First Nation
 7. Ebb and Flow First Nation
 8. Lake Manitoba First Nation
 9. Kinonjeoshtegon First Nation
 10. Misipawistic Cree Nation
 11. Sandy Bay First Nation
 12. Skownan First Nation
 13. Keeseekoowenin Ojibway First Nation
- LAKE WINNIPEG COMMUNITIES:**
14. Fisher River Cree Nation
 15. Peguis First Nation
 16. Bloodvein First Nation
 17. Norway House Cree Nation
 18. Berens River First Nation
 19. Hollow Water First Nation
 20. Brokenhead Ojibway Nation
 21. Sagkeeng First Nation
 22. Black River First Nation
 23. Poplar River First Nation
- NORTHERN AFFAIRS COMMUNITIES**
24. Aghaming NAC
 25. Berens River NAC
 26. Fisher Bay NAC
 27. Loon Straits NAC
 28. Manigotagan NAC
 29. Matheson Island NAC
 30. Pine Dock NAC
 31. Princess Harbour NAC
 32. Seymourville NAC
 33. Norway House NAC
- NELSON RIVER COMMUNITIES:**
34. Fox Lake Cree Nation
 35. Pimicikamak Okimawin (Cross Lake Band of Indians)
 36. York Factory Cree Nation
 37. Tataskweyak Cree Nation
- OTHER ORGANIZATIONS:**
38. Manitoba Metis Federation
 39. Council of Chiefs of Anishinaabe Agowidiwinan (First Nations in Treaty 2 Territory)

Outlet Channel Project Area Communities, Groups, and Governments

CONSULTATION PROCESS



148
Number of meetings with Indigenous communities and groups



CONSULTATION WORK PLANS AND FUNDING AGREEMENTS SIGNED TO-DATE **6**

- Traditional Knowledge Studies
- Community Coordinator
- Meetings/Workshops
- Chief and Council Presentations

1549
Record of communication (phone calls, correspondence, and emails) with Indigenous communities and groups

What we've heard – Indigenous, rural municipal, and public feedback

This summary includes key issues heard to date during engagement and consultation with Indigenous communities, groups, and governments; rural municipal stakeholders; and the general public.

Concern	Response
<p>Impacts or changes to fish health and quality, and a loss of fish habitat</p>	<p>The Lake Manitoba, Lake St. Martin, and Lake Winnipeg are currently connected water systems and the outlet channels will result in a new pathway resulting in a small increase of downstream fish movement. Once constructed, the outlet channels will also provide continuous year round habitat. Manitoba Infrastructure (MI) predicts that summer and winter fish needs will be met as water will remain in the channels during operational and non-operational periods. There could be some potential temporary alterations to fish habitat during construction of the inlet and outlet and through excavation of the outlet channels but these will be mitigated through best management practices.</p>
<p>Introduction of aquatic invasive species from Lake Winnipeg</p>	<p>The outlet channels do not connect previously separate water bodies, as Lake Manitoba, Lake St. Martin and Lake Winnipeg are all naturally connected through the Fairford and Dauphin Rivers. The spread of AIS could occur through the transfer of machinery between waterbodies. To reduce these risks, MI will comply with provincial aquatic invasive species regulations and will require machinery to be cleaned and decontaminated.</p>
<p>Fish stranding and mortality within the outlet channels</p>	<p>Water will remain in the channels during operational and non-operational periods to reduce fish stranding. During non-operational times, the depth of water in the Lake Manitoba Outlet Channel will range from 4 to 8 metres. The depth of water in the Lake St. Martin Outlet Channel will range from 1.6 to 3.4 metres, and deeper pools will be constructed to ensure summer and winter fish needs are met. The outlet channel also includes several drop structures that will be designed to enable downstream fish movement during operation. The design will also prevent fish from entering the outlet channel from Lake Winnipeg.</p>
<p>Decline in water quality</p>	<p>Baseline water quality monitoring on Lake Manitoba, Lake St. Martin, Lake Winnipeg and other key connecting and affected water bodies has been completed. The outlet channels will not change natural connectivity between the lakes; it will only provide additional outflow capacities. As such, these systems share similar water quality characteristics and water quality is not anticipated to change. Potential alterations to water quality could occur during construction due to potential accidents, spills or malfunctions but will be mitigated through best management practices and appropriate response measures.</p>
<p>Increased algae blooms</p>	<p>Lake Manitoba, Lake St. Martin, and Lake Winnipeg are currently connected water systems sharing similar water quality characteristics. Monitoring data from the operation of the Lake St. Martin Emergency Outlet Channel did not indicate any significant changes to water quality in Lake Winnipeg or Lake St. Martin. MI will also undertake additional water quality monitoring during pre-construction, construction, and operational periods of the project to verify and address project-related effects.</p>
<p>Impacts to drinking water</p>	<p>Potential alteration to local groundwater flows, such as the drawdown of local wells, may occur and MI is committed to working with potentially affected well users to mitigate these risks. Mitigations could include lowering existing pumps, supplying new pumps, drilling new wells, or providing water tanks to affected well users.</p>
<p>Rationale for two outlet channels</p>	<p>The 2011 and 2014 flood events caused catastrophic consequences to people and infrastructure in the area and highlighted remaining flood vulnerabilities on Lake Manitoba and Lake St. Martin, requiring sustained high outflows through the Fairford River Water Control Structure and construction of the Lake St. Martin Emergency Outlet Channel. The outlet channels will mitigate these remaining vulnerabilities on both Lake Manitoba and Lake St. Martin.</p>
<p>Impacts of fluctuating water levels on the lakes</p>	<p>Operating guidelines have been developed to reduce the severity of flooding on Lake Manitoba and Lake St. Martin. The operation of the outlet channels will increase the outflows from Lake Manitoba and Lake St. Martin during flood conditions to maintain lake levels at lower levels. There will also be less flow through the Fairford River and Dauphin River during flood conditions, reducing flooding along these waterways. No discernable effect is expected on Lake Winnipeg or further downstream. During non-flood conditions, the outlet channels will not decrease lake and river levels.</p>
<p>Future use of the Lake St. Martin Emergency Outlet Channel</p>	<p>The construction and operation of the Lake St. Martin Outlet Channel does not physically alter drainage areas, but the location of the outlet channel will intercept drainage to the Buffalo Creek system. MI may consider repurposing the existing emergency channel to replenish water flows into the Buffalo Creek System that may be lost as a result of channel construction and impacts to local drainage patterns.</p>

What we've heard – Indigenous, rural municipal, and public feedback

Concern	Response
Impacts to furbearers, such as muskrat	<p>Following construction, the outlet channels may provide suitable wildlife habitat for species that use shoreline grass and shrub-dominated habitats, such as furbearers, which are traditionally trapped or hunted in the area.</p> <p>And while potential alterations to the habitat of shoreline wildlife could occur during project operations due to fluctuating water levels, the outlet channels will ensure consistent predictable water levels and will decrease the severity of flooding on Lake Manitoba and Lake St. Martin.</p>
Impacts to wildlife population	<p>While the outlet channels have the potential to impact wildlife abundance, project routing and design considered habitat areas along the channels. Baseline land cover data was used to estimate wildlife habitat abundance and project areas that could overlap with breeding areas. MI will also undertake monitoring during pre-construction, construction, and operational periods.</p> <p>During construction, wildlife mortality could occur from accidental collisions with project equipment or vegetation clearing that destroys wildlife nests, roosts, or dens. MI will implement best management practices to reduce these risks.</p>
Wildlife movement restrictions	<p>While the outlet channels have the potential to restrict or impede wildlife movement, project routing and design considered habitat areas along the channels. MI will also undertake monitoring during pre-construction, construction, and operational periods to assess the potential impact of seasonal movement patterns of wildlife and address unanticipated effects.</p> <p>During construction, MI will implement best management practices to reduce potential impacts, including the use of cover planting and minimal use of rip rap.</p>
Indigenous knowledge/perspective included or considered	<p>Information gathered through Indigenous Consultation, traditional knowledge studies, and the environmental assessment indicate that construction of the outlet channels has the potential to affect traditional activities, sites, and resources identified by Indigenous groups and communities.</p> <p>MI is committed to fulfilling its Crown-Indigenous consultation and engagement obligations, including continued discussions through ongoing Indigenous Consultation to help MI better understand Indigenous knowledge/perspectives on community use and impacts from the project.</p>
Traditional routes and access	<p>Information gathered through Indigenous Consultation, traditional knowledge studies, and the environmental assessment indicate that construction of the Lake St. Martin Outlet Channel has the potential to intersect and potentially affect important trails and access routes for fishing, hunting, and gathering areas. MI is committed to fulfilling its Crown-Indigenous consultation and engagement obligations, including continued discussions through ongoing Indigenous Consultation to help MI better understand Indigenous knowledge/perspectives on traditional trails or access routes and potential impacts from the project.</p>
Elder knowledge/local knowledge included or considered	<p>MI is committed to fulfilling its Crown-Indigenous consultation and engagement obligations, including providing capacity to support meaningful participation through Traditional Knowledge studies, in advance of making a decision on the outlet channels project.</p>
Desire for economic opportunities	<p>MI is committed to providing Indigenous participation provisions on all project related tendering. Provisions will be in accordance with provincial procurement policies.</p>
Consultation and engagement process	<p>MI is committed to fulfilling its Crown-Indigenous consultation and engagement obligations, including providing capacity to support meaningful participation, in advance of making a decision on the outlet channels project. Work plans to achieve consultation objectives have been developed for all communities and funding is available to implement these plans.</p>

The **environmental assessment** further describes project components and activities that may result in other potential impacts and outlines MI's proposed mitigations.

Additional Traditional Knowledge and feedback from ongoing Indigenous consultation and stakeholder engagement will help MI to better understand community use and impacts from the project. These discussions will also help to inform the development of monitoring and mitigation plans to address these issues. Monitoring and mitigations from these plans, and best management practices, will be utilized during construction and operation to limit project impacts. These programs will be designed to be adaptive throughout the project to incorporate new community information as it's received.

Please share your concerns about the potential effects of the project by participating in meetings or by contacting your local project Community Coordinator, band office, government office, association or email outletchannels@gov.mb.ca

For updates on the project please visit <https://engagemb.ca/>