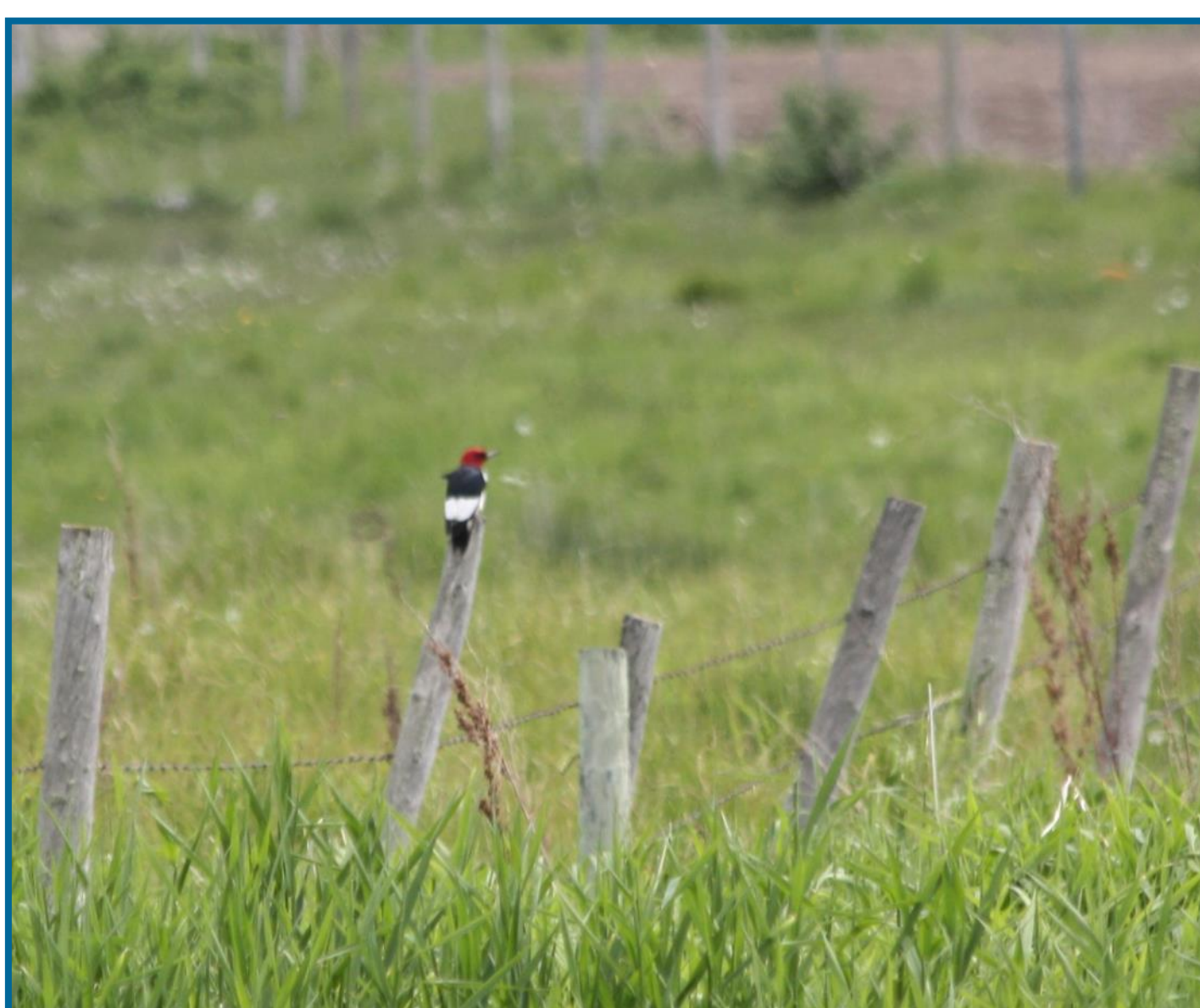


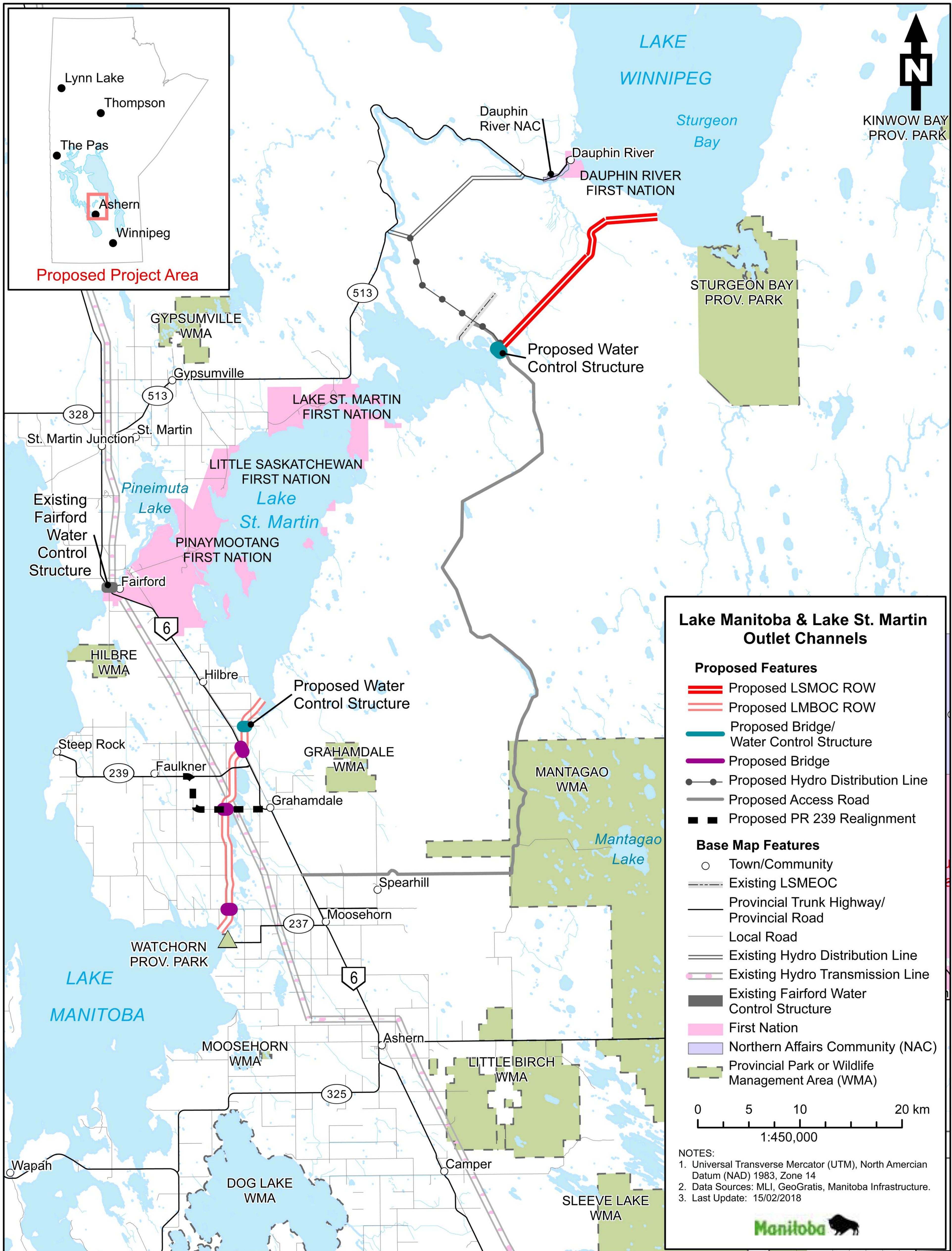
Welcome

# Lake Manitoba and Lake St. Martin Outlet Channels Project



March 2018 Open House







# The Project

## Background

Recent flooding highlighted the need to better control Lake St. Martin and Lake Manitoba.

Widespread flooding across much of southern Manitoba in 2011 resulted in unprecedented inflows into Lake Manitoba and Lake St. Martin — overwhelming the capacity of existing waterways.

Lake St. Martin Emergency Channel was constructed in 2011 and operated in 2011 and 2014.

Flooding resulted in long-term evacuation of First Nation communities, affecting thousands of acres of farmland, bridges and highways, and homes and cottages.

The need for permanent channels was identified.

## Past—Public and Indigenous Outreach

Indigenous Peoples and Communities	<ul style="list-style-type: none"> <li>• Community meetings</li> <li>• Information sessions</li> </ul>
Local Landowners	<ul style="list-style-type: none"> <li>• Individual visits and meetings</li> <li>• Information sessions</li> <li>• Open houses</li> </ul>
General Public	<ul style="list-style-type: none"> <li>• Public information sessions</li> <li>• Open houses</li> </ul>
Municipal and Local Governments	<ul style="list-style-type: none"> <li>• Planning and update meetings</li> <li>• Information sessions</li> <li>• Open houses</li> </ul>
Other Government Agencies	<ul style="list-style-type: none"> <li>• Planning and update meetings</li> <li>• Site visits</li> </ul>

## The Project

### Water control systems working together

The Lake Manitoba Outlet Channel will work in tandem with the existing Fairford River Water Control Structure to help mitigate flooding on Lake Manitoba.

The Lake St. Martin Outlet Channel will increase the ability to convey flood waters to Lake Winnipeg and provide improved flood protection around Lake St. Martin without appreciably affecting lake levels on Lake Winnipeg.

The two proposed channels will provide greater flexibility in operating the provincial water control system including the Portage Diversion.

## Project History

Provincial Flood Review:

2011 Flood Review Task Force Report

2013 Lake Manitoba and Lake St. Martin Regulation  
Review Committee Report

2016 Assiniboine River and Lake Manitoba Basins Flood  
Mitigation Study

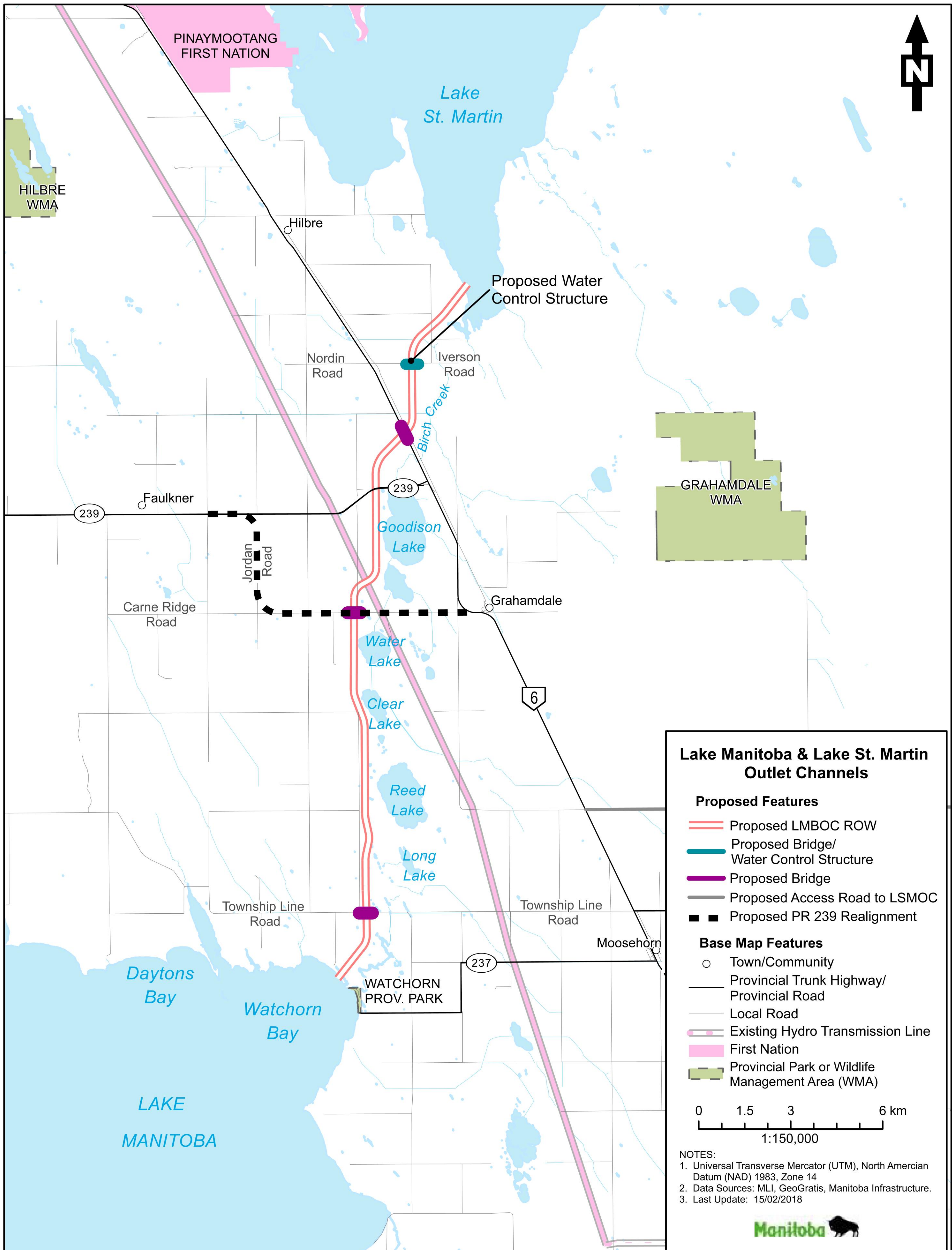
The Provincial Review resulted in many different options and recommendations to start with developing the Lake Manitoba and Lake St. Martin Outlet Channels.

Conceptual design report (KGS) compared six options for Lake Manitoba Outlet Channel and four options for the Lake St. Martin Outlet Channel.

As a result, preferred options were recommended.

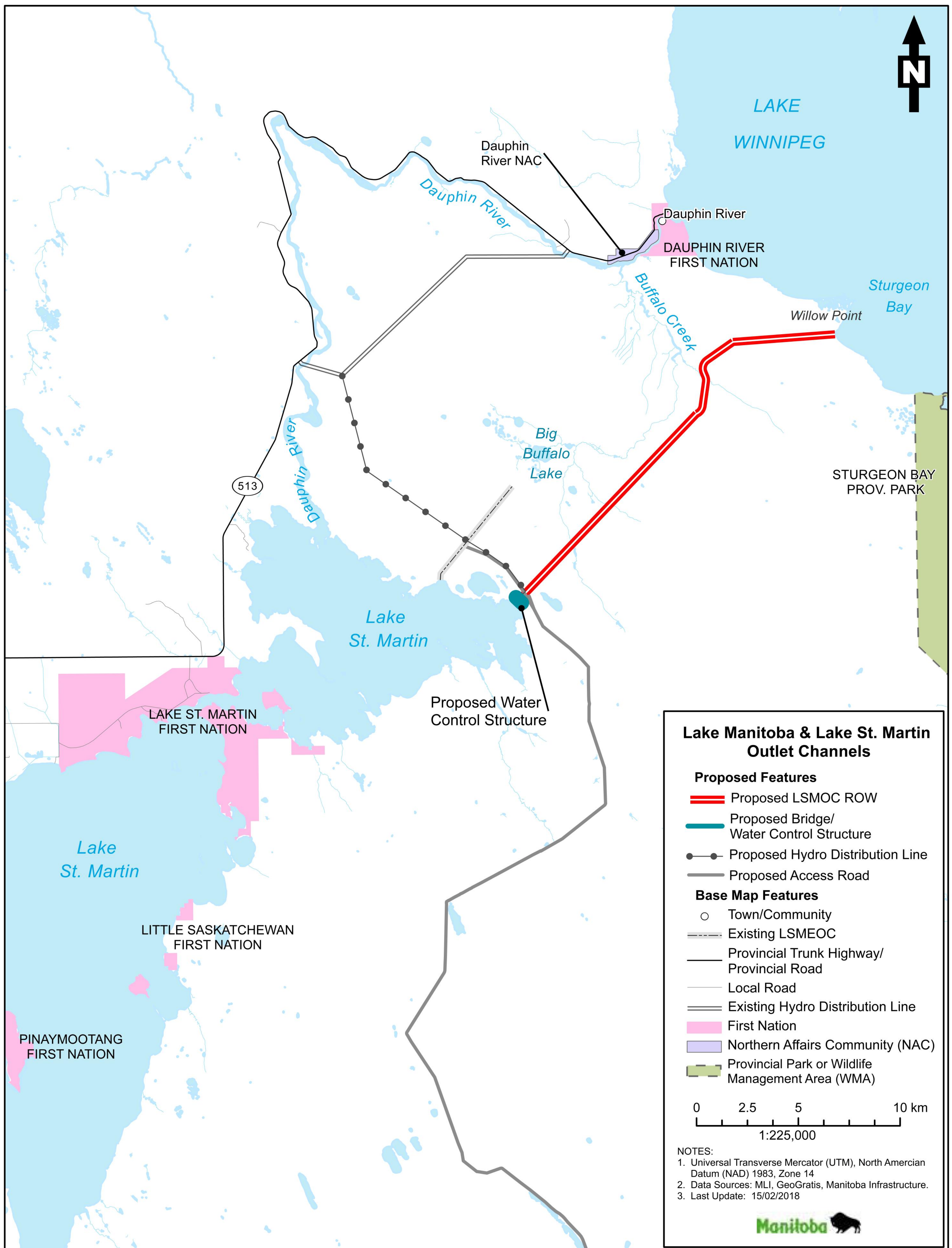


# Proposed Lake Manitoba Outlet Channel



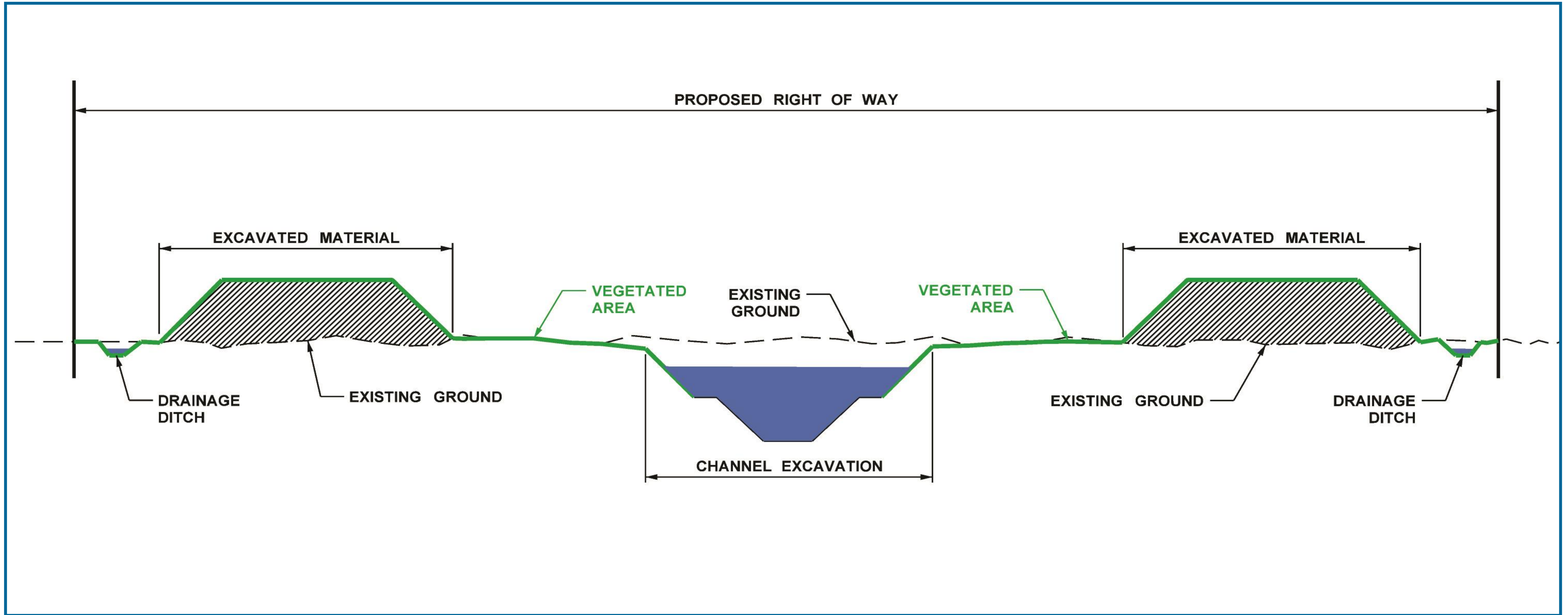


## Proposed Lake St. Martin Outlet Channel

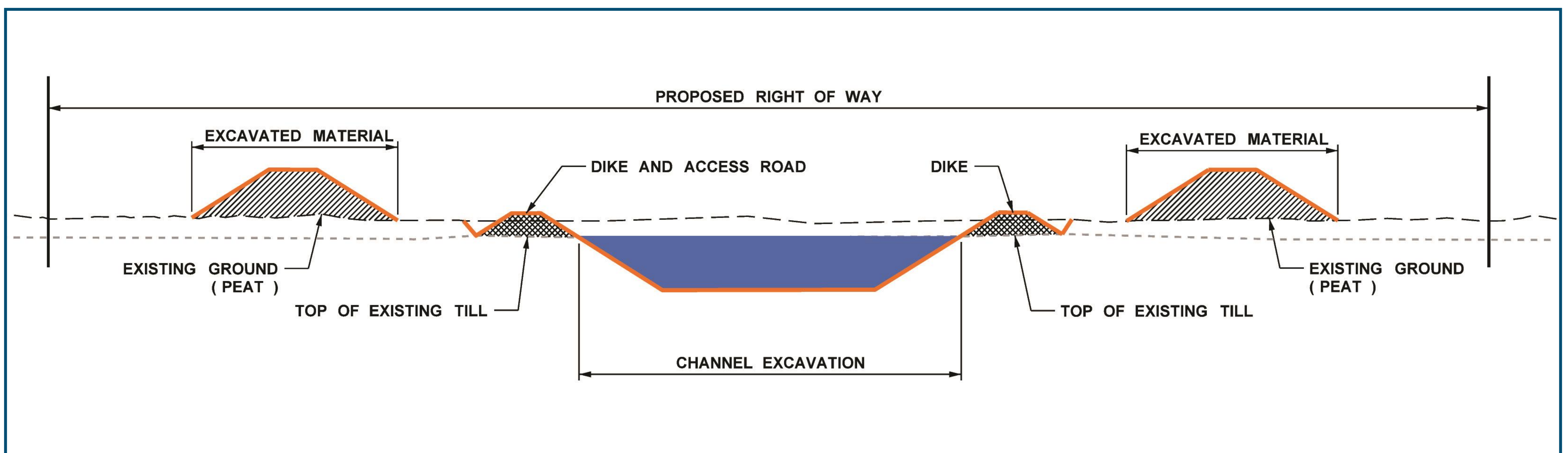




# Proposed Outlet Channels



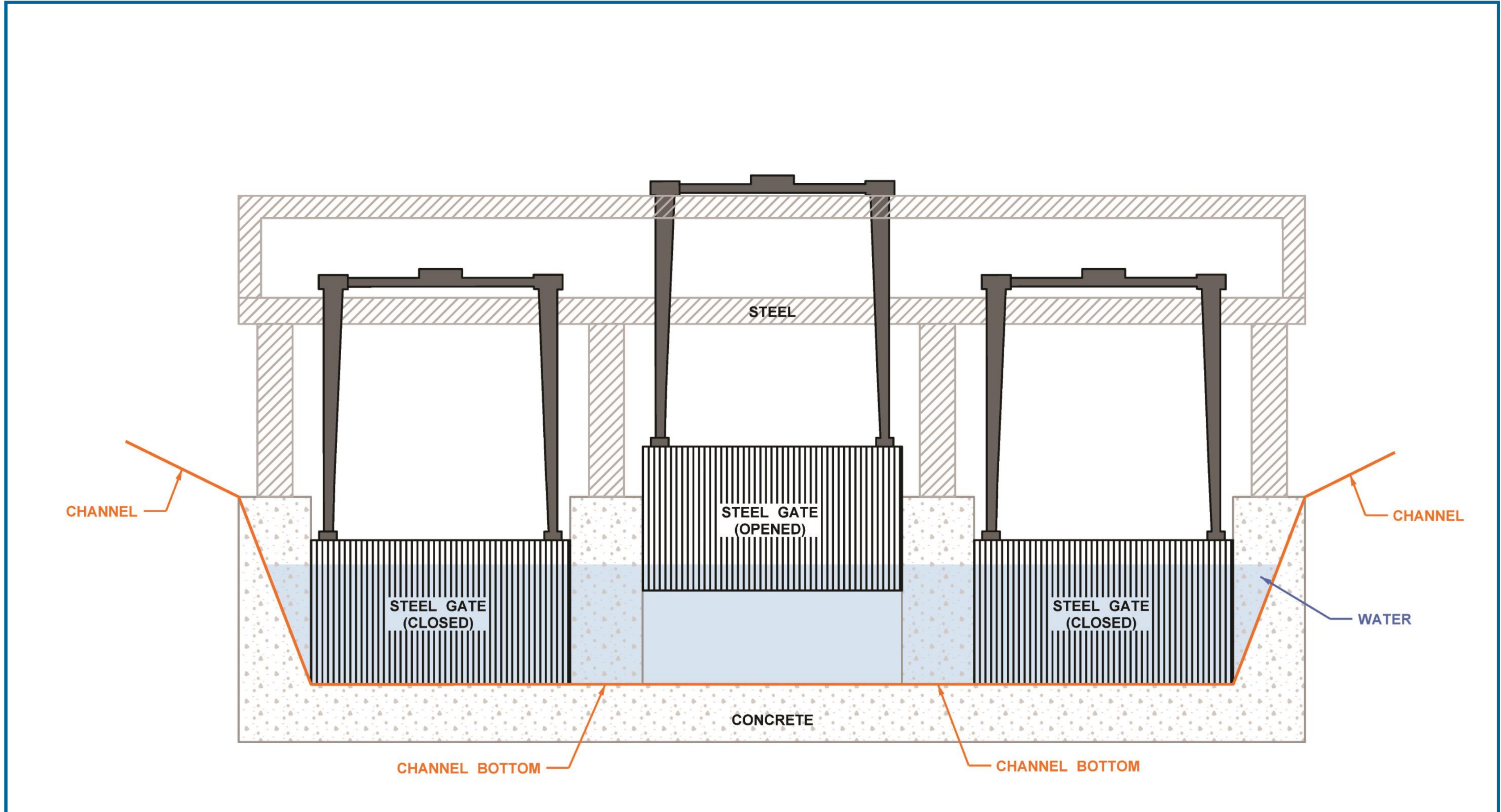
**Lake Manitoba Outlet Channel Conceptual Cross Section**



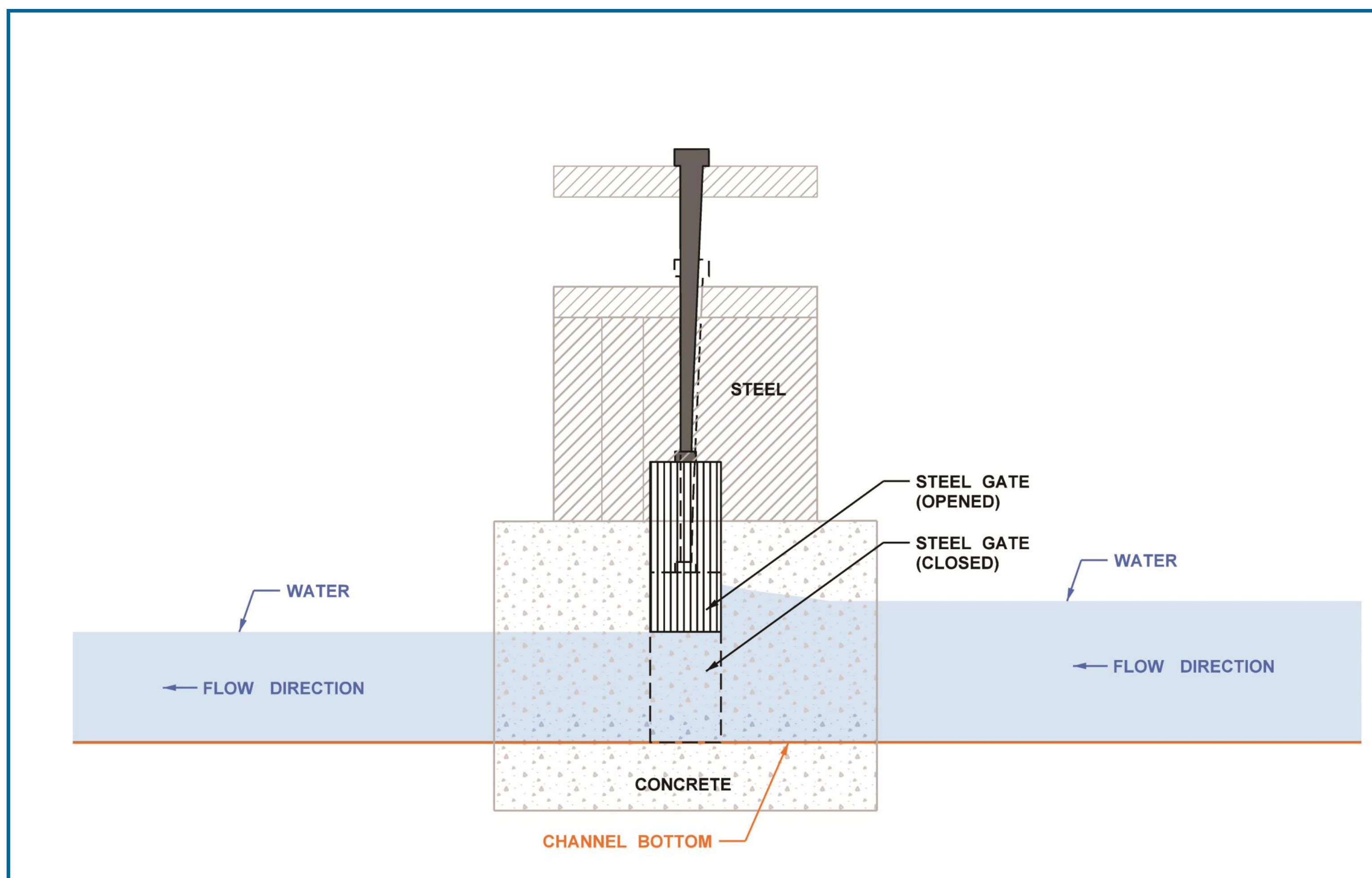
**Lake St. Martin Outlet Channel Conceptual Cross Section**



# Proposed Water Control Structures



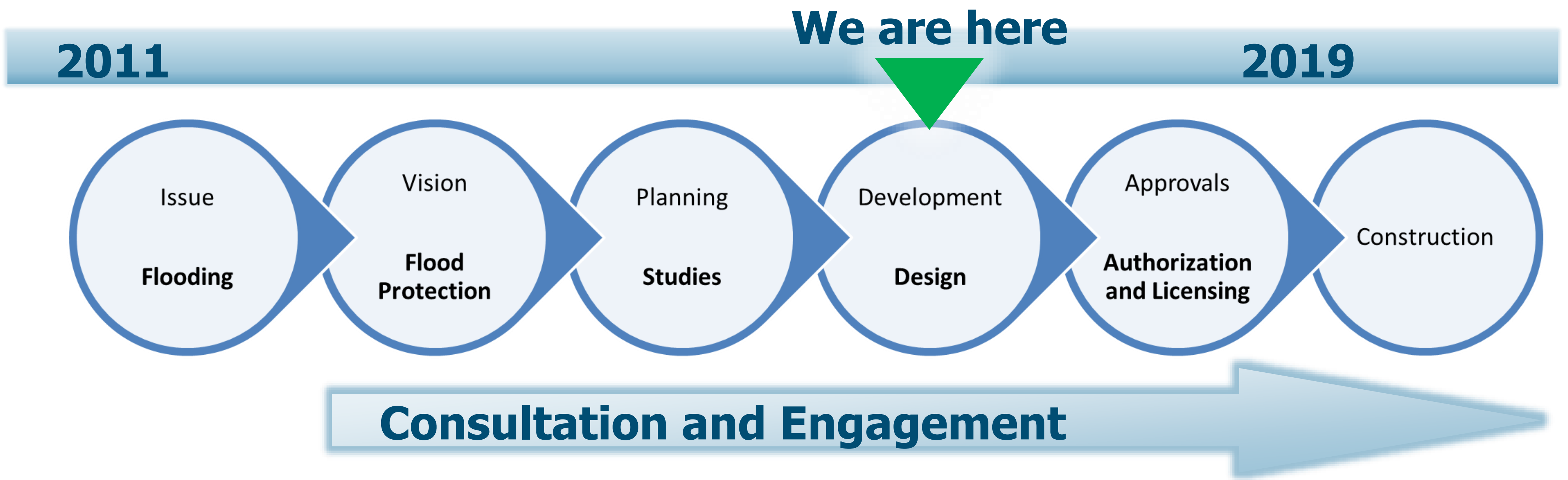
**Water Control Structure (3 Bay) Conceptual Cross Section**



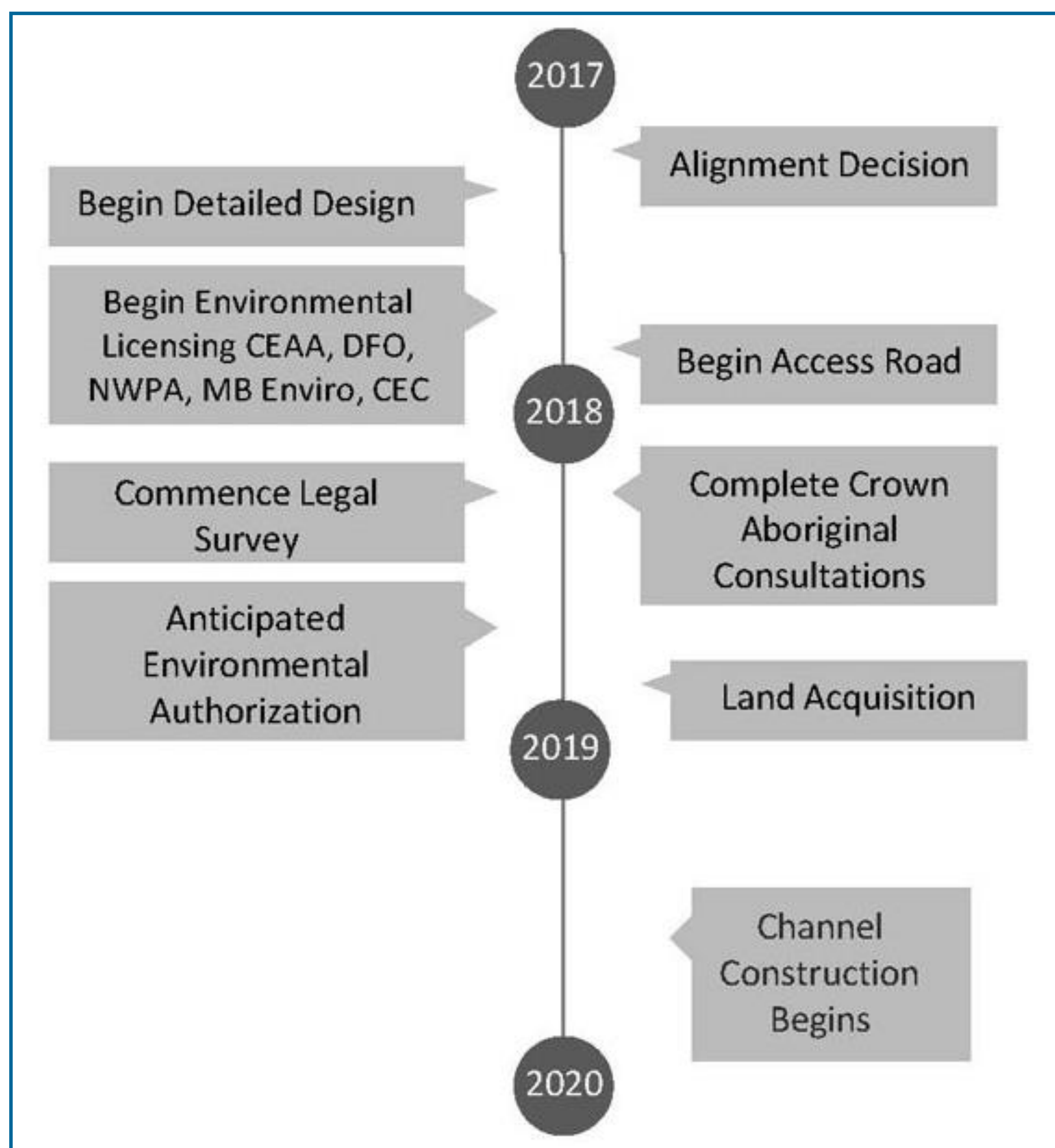
**Water Control Structure (3 Bay) Conceptual Profile**



# Design and Construction



## Project Planning Phases



Timeline



# Why Conduct an Environmental Assessment?

Manitoba Infrastructure is working to develop the Project plan in an environmentally responsible manner.

Government requirements through legislation, such as:

## **Manitoba – Environmental Approvals**

Authorization is granted in the form of an Environment Act Licence under The Environment Act of Manitoba and considers other legislation and guidance.

## **Canada – Canadian Environmental Assessment Agency**

Authorization is granted in the form of an Environmental Assessment Decision under the Canadian Environmental Assessment Act 2012 and other legislation such as the Navigable Waters Protection Act.

## **Department of Fisheries and Oceans - Fisheries Authorizations**

Are specific to activities that may affect fish or fish habitat; required for work conducted in fish bearing waterways such as bridges and culverts.



# What is an Environmental Assessment?

Identifies project and environment interaction, predicts effects, identifies measures to avoid/minimize impacts, and monitor and follow-up to verify predictions and effectiveness of measures.

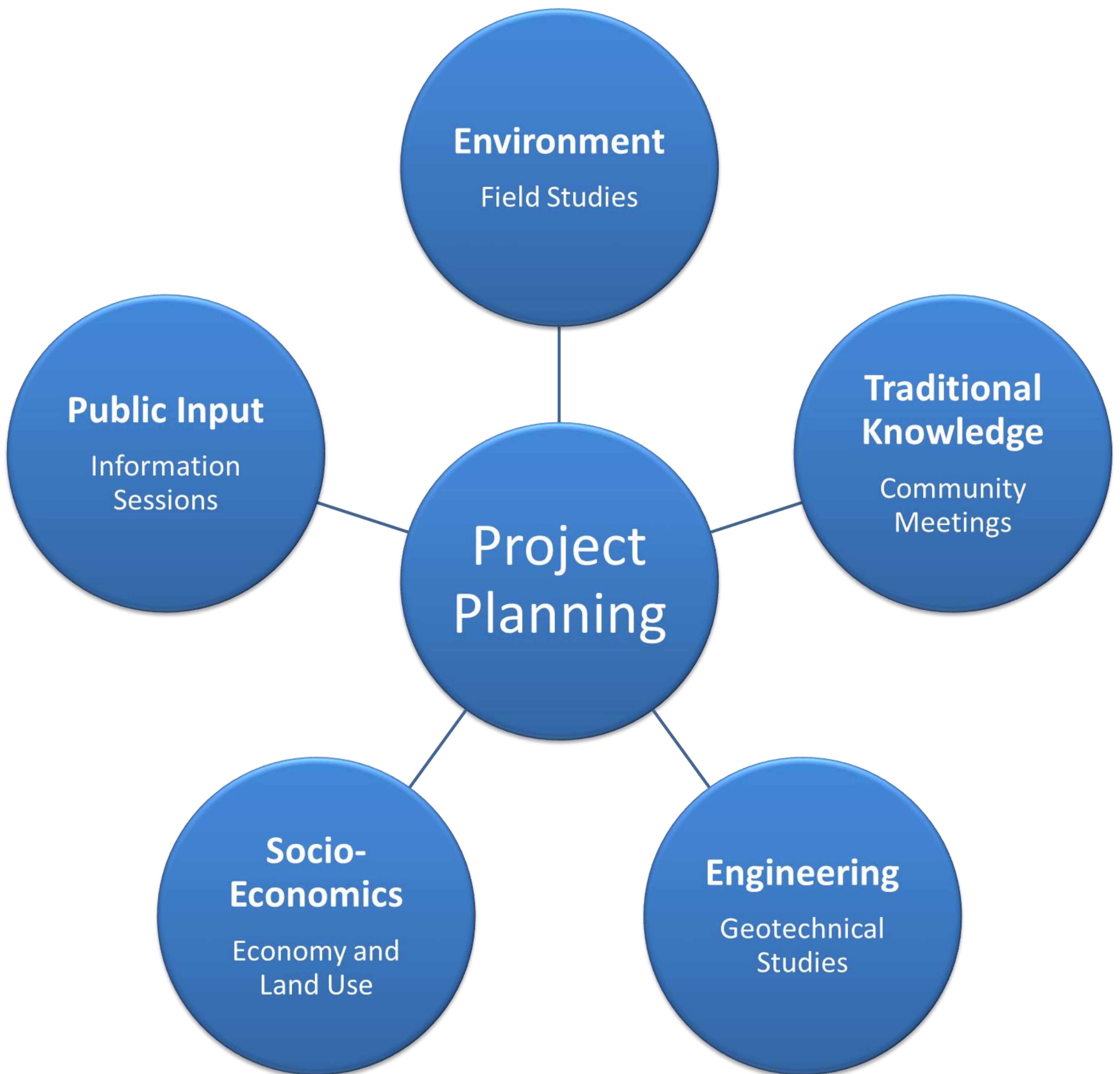
Includes potential effects on the biophysical and socio-economic environments (includes Indigenous and non-Indigenous people).

Assessments undergo federal and provincial government review.

The Federal and Provincial governments review all information submitted on a project and determine whether it can proceed to development.

If a project is approved, license requirements may stipulate additional measures such as short-term and/or long-term monitoring and reporting requirements.







# What's There Now?

## The Project Region Contains:

The Lake Manitoba Outlet Channel area is surrounded by grassland, agriculture, wetlands and forests.



The Lake St. Martin Outlet Channel area is surrounded by wetlands and upland forests and is semi-remote.

Several species at risk occur here, such as: red-headed woodpecker, bobolink, short-eared owl

Large animals such as: elk, deer, coyotes, lynx and wolves.



Fish species common to these waters include: walleye, northern pike, lake whitefish, and perch.

## Human History and Traditional Use

Evidence of human occupation and resource harvesting in the region over the past 8000-7000 years.

Six registered archeological sites in the project area:

- Four from the fur trade and homestead period

- Two from 350 to 2000 years ago and had stone tools and/or ceramics



# Main Stages of Environmental Assessment

Scope of environmental assessment

Project setting and baseline conditions

Identification of potential effects

Avoidance/reduction of adverse effects

Other effects to consider

Follow-up and monitoring





# Main Stages of Environmental Assessment

## **SCOPE**

The area and timeframe in which we examine changes to people and the environment.

## **PROJECT SETTING**

The description of people and the environment, which uses various information sources.

## **IDENTIFICATION OF POTENTIAL EFFECTS**

Potential changes to environment and effects on people.

## **AVOIDANCE/REDUCTION OF ADVERSE EFFECTS**

Considers the environmental effects that are likely to occur prior to and after implementation of mitigation measures.

## **OTHER EFFECTS TO CONSIDER**

Potential accidents or malfunctions, contingency and emergency measures.

Cumulative environmental effects.

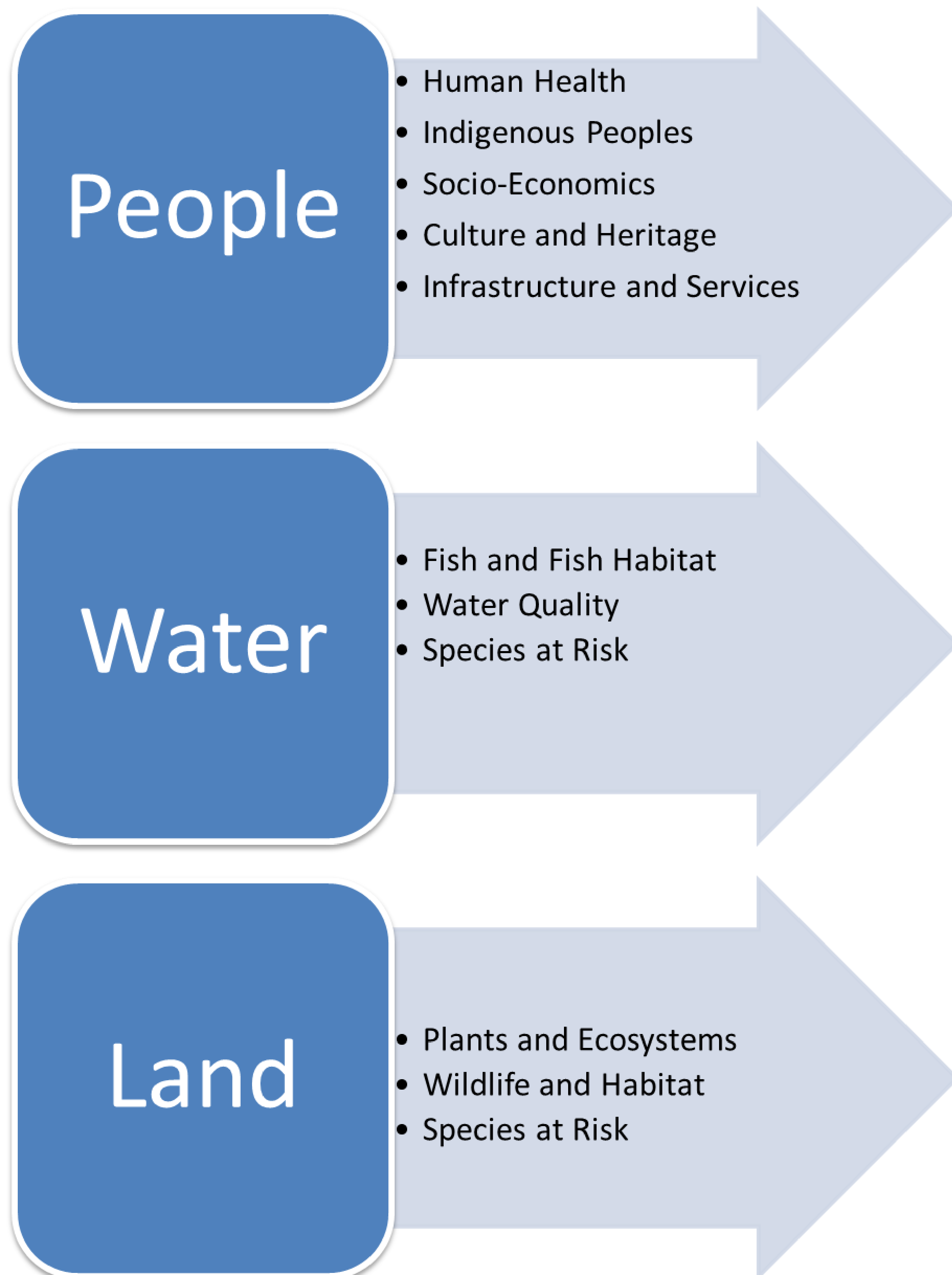
## **FOLLOW-UP AND MONITORING**

Verify accuracy of the effects assessment and determine effectiveness of mitigation and design measures.



# Environmental Assessment Topics

Environmental topics used to measure changes and assess impact to the environment as a result of the project are:



Environmental topics may be affected by the Project and are of expressed importance to local Indigenous communities, regulatory authorities and/or other stakeholders.



# Ways to Address Possible Effects

The appropriate measure to address a potential effect is determined after the effect is identified and may include:

**AVOID**

**AVOIDING** the effect altogether (most preferred)

**MINIMIZE**

**MINIMIZING** effects by limiting the degree or magnitude of the action and its implementation

**RESTORE**

**RESTORING** by applying rehabilitation techniques after the effect may have occurred, such as revegetation of disturbed areas

**OFFSET**

**OFFSETTING** potential effects through measures such as offsite habitat creation

**MONITOR**

**MONITORING** the project over time to identify and reduce potential effects



## Please Stay and Talk With Us

Provide information and concerns so they can be considered in the environmental assessment and be addressed in project design.

- ✓ Write on Discussion Boards
- ✓ Talk with Project Staff
- ✓ Complete a Questionnaire
- ✓ Email comments: [outletchannel@gov.mb.ca](mailto:outletchannel@gov.mb.ca)

Learn more:

[www.gov.mb.ca/mit/wmslmbblmoutlets/index.html](http://www.gov.mb.ca/mit/wmslmbblmoutlets/index.html)

### Future Open Houses

Summer 2018—Moosehorn and Winnipeg

Fall 2018—Moosehorn and Winnipeg



# Thank You



For more information, you can also contact  
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