

## 1.0 INTRODUCTION

### 1.1 Need and Purpose

The Pointe du Bois **Generating Station**<sup>1</sup> is the oldest **hydroelectric** plant operating in Manitoba. The station was constructed between 1909 and 1926 with the first unit put into service in 1911. The existing **spillway** facilities consist of ninety-seven spillway/**sluiceway** bays. With the exception of six remotely controlled bays, they are manually operated. In 2002, **Manitoba Hydro** acquired the station as part of the purchase of **Winnipeg Hydro**. Figure 1.1 illustrates the general location of the Pointe du Bois facilities.

Despite extensive repairs and upgrades that have been conducted over the years, the spillway facilities at Pointe du Bois require replacement in order to maintain public and **dam** safety and provide a safer working environment for staff. Accordingly, Manitoba Hydro has decided to undertake the Pointe du Bois Spillway Replacement **Project** (the Project). With these improvements, the current Canadian Dam Association Dam Safety Guidelines (2007) will be addressed.

### 1.2 Scope of the Spillway Replacement Project

The Project will be constructed just downstream of the existing spillway and **rockfill dam**. It will consist of the following activities and components:

- ◆ Construction and operation of the following permanent structures:
  - Primary spillway including approach and discharge channels;
  - Secondary spillway;
  - **Transition structures** and **wing walls**; and
  - Earthfill dams.
- ◆ Construction and operation of the following permanent **infrastructure**:
  - Construction/permanent **power**; and
  - Townsite access roadway.
- ◆ Construction and **decommissioning** of the following construction infrastructure:
  - Work areas;
  - Buildings;
  - **Concrete batch plants** and crushing operations;

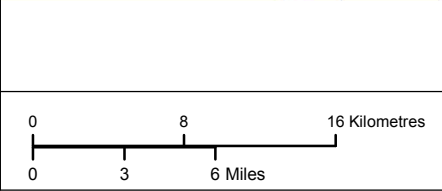
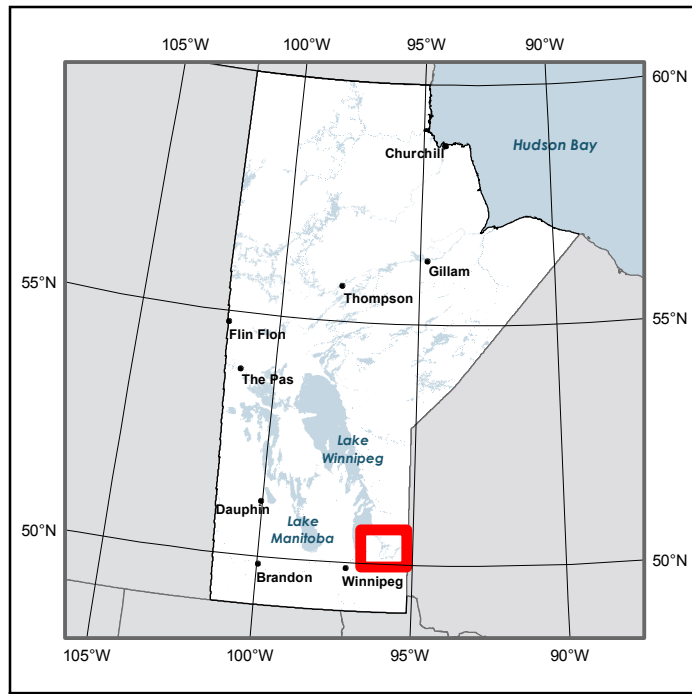
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<sup>1</sup> Words shown in bold contain a definition that is described in greater detail in the Glossary found in Chapter 13.0.

- Construction access (includes barge landings, winter ice roads and lower spillway shelf road);
  - Construction roadways;
  - Stabilization of the east gravity dam;
  - Material source areas;
  - Excavated material placement area;
  - Cofferdams;
  - Stormwater management ponds;
  - Water, wastewater and waste management;
  - Fuel storage and transportation; and
  - Explosives storage.
- ◆ Decommissioning of the following existing structures:
    - Existing spillway and water retaining structures (not including the **powerhouse**).

The existing powerhouse will continue to be operated and maintained. The operation and maintenance of the powerhouse is not within the scope of the Spillway Replacement Project.

The general arrangement of the Project is outlined on Figure 1.2.



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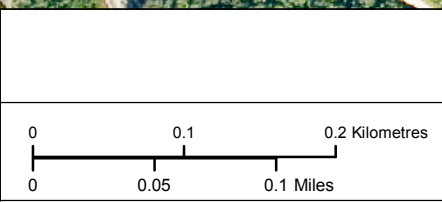
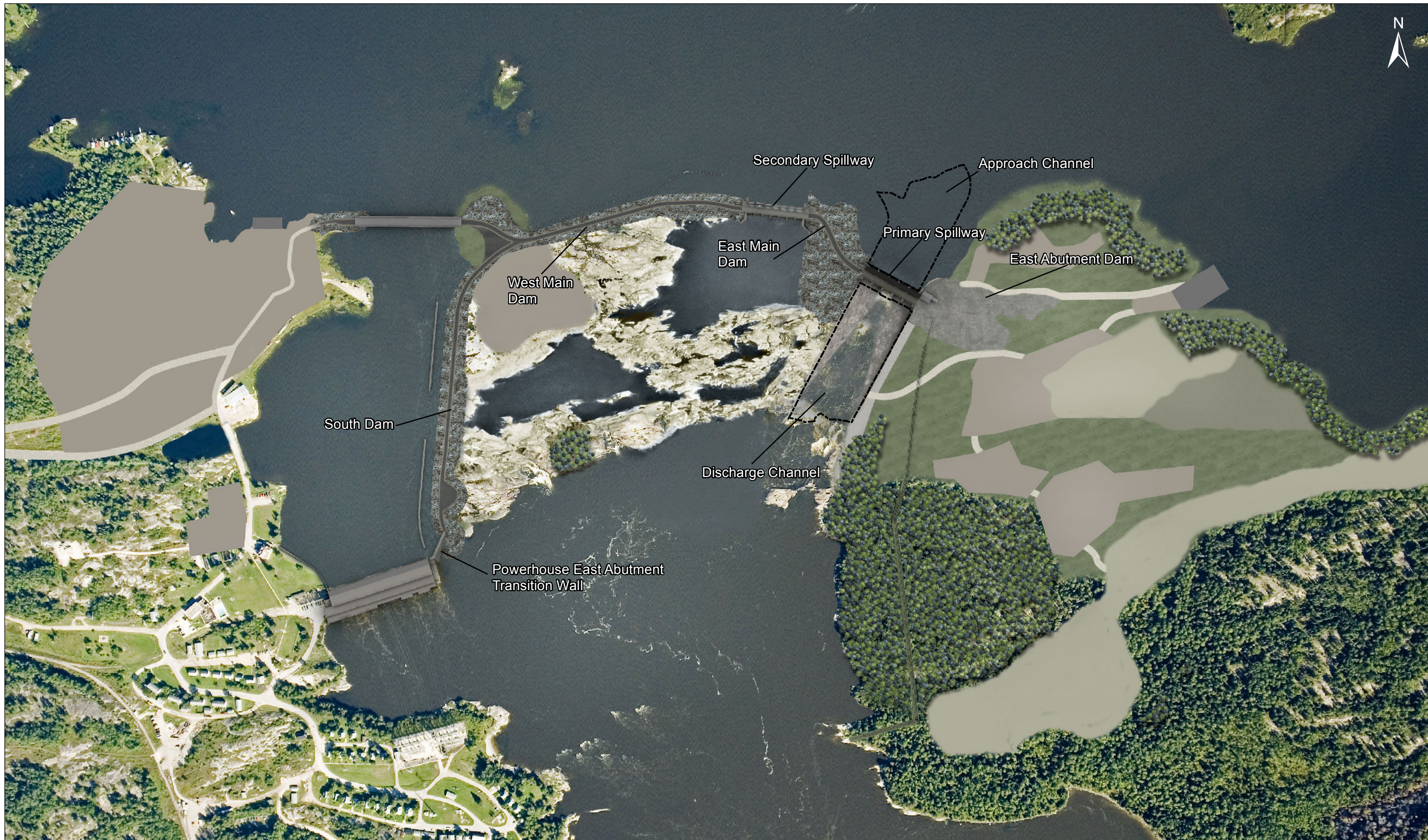
Legend	
ROAD - GENERAL	Pointe du Bois G.S.  Project Location
RAIL LINE	Provincial Parks
Generating Stations (G.S.)	Reserve Land

**Pointe du Bois  
Spillway Replacement Project**

**Project Location Map**

Figure:  
1.1





DATA SOURCE: Manitoba Hydro, KGS Acres		
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## Pointe du Bois Spillway Replacement Project

Principal Structures

Figure:  
1.2