Muskrat Falls Generation Project

Dam Safety Monitoring Program Overview

August 2019

Ensuring that our dams and facilities are safe is our priority.

The Muskrat Falls generation facility has been built to the highest standards of dam safety and is monitored and constructed to meet Canadian Dam Association (CDA) Dam Guidelines.

We have a comprehensive Dam Safety Program for Muskrat Falls developed by SNC-Lavalin. This program includes detailed inspections, monitoring, analysis and reporting of all dams and water retaining structures at the Muskrat Falls site. In addition, our Dam Safety Management Program has been independently reviewed and audited by Hatch Inc. In its fourth Dam Safety Review & Audit (April 2019), Hatch noted that our Dam Safety Management Program is in compliance with the CDA guiding principles and continues to meet or exceed good industry practice.

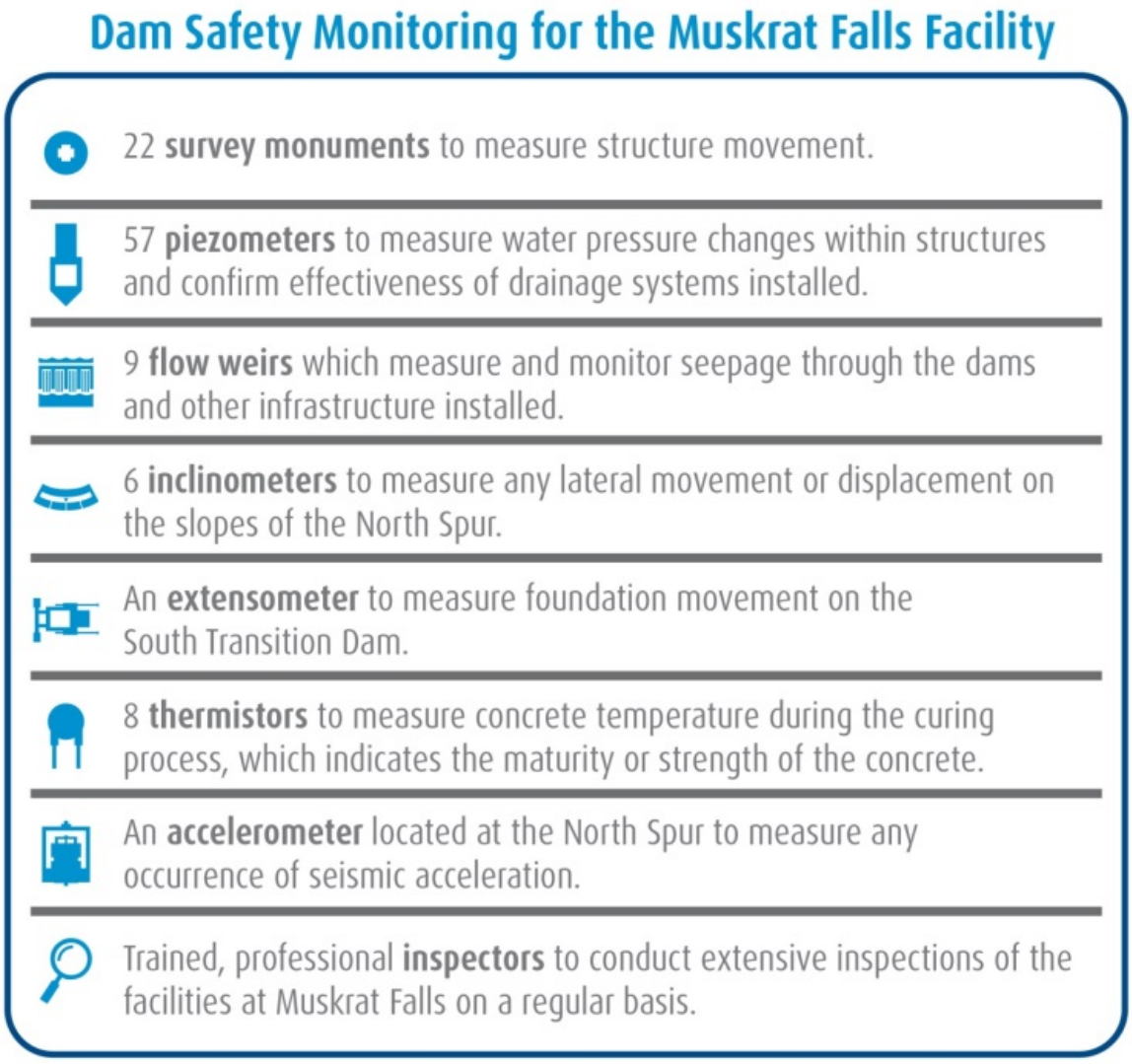
Our dam safety monitoring is designed to assess the force/pressure of the water from the reservoir on permanent structures of the Muskrat Falls facility including the South Dam, Powerhouse, Spillway, North Dam, North Spur and three Transition Dams. The following illustration shows the various structures and explains their function.

South Dam	Powerhouse	Intake & Tailrace	Spillway	Transition Dams	North Dam	North Spur
Conventional rock-fill till-core dam that closes the south part of the reservoir between the south bank and Powerhouse.	Houses the four generating units.	The Intake draws water from the river into the Powerhouse. Water exits the Powerhouse through the Tailrace.	Primary function is to pass the water that is not required to generate electricity in the Powerhouse.	Concrete dams to make the connection between the South Dam & Powerhouse; Powerhouse & Spillway; and Spillway & North Dam.	Concrete dam used to close the north part of the reservoir.	This is a natural dam that has been reinforced.

Dam Safety Monitoring of the Muskrat Falls Facility

Our dam safety team uses a combination of manual and automated processes to frequently monitor the generation facilities to confirm that the structures are performing as designed.

Our trained staff frequently walks around the structures inspecting, observing and recording their behaviour. They also travel by helicopter to survey the entire reservoir area. Automated monitoring includes observing and analysing a variety of instruments that measure and record such things as water pressure and seepage, structure movement, water level and temperature. The image below lists the instruments installed for the generation structures and the conditions they monitor.



Keeping You Informed

Following the start of impoundment, we will keep stakeholders informed through our weekly updates. In addition to providing information about water levels, we will also issue a dam safety monitoring report with information and observations from our dam monitoring program in relation to each of the generation structures listed above.