

Muskrat Falls Generation Project Stakeholder Update

FEBRUARY 13, 2018 - Information on Landslides on the lower Churchill River

We understand the concerns we've been hearing from residents about the landslide that recently occurred on the north side of the lower Churchill River downstream of the North Spur. People have been expressing concern for their safety and well-being, and some have raised questions about the stability of the North Spur.

The safety of the people and the communities in which we operate is our priority. We've prepared the information below to help address some of the questions we've received from the community, and to let people know that the recent landslide that occurred downstream of Muskrat Falls is not related to the stability of the North Spur.

Landslides on the Churchill River

Landslide activity on the banks of the lower Churchill River is a fairly common occurrence and has been studied as part of the planning for the Muskrat Falls Project. There is visible evidence of landslides along the river banks dating back many decades.

As noted below, the reinforcement and stabilization work on the North Spur has been completed to prevent slide events on this important location. Slides elsewhere on the river banks do not pose a risk to the North Spur or the Muskrat Falls facilities. As a result, work has not been undertaken elsewhere on the river banks to prevent landslide activity. Therefore, landslides are expected to occur from time to time in the future as they have in the past.

Stabilizing the North Spur

The North Spur dam is a critical piece of infrastructure within the Muskrat Falls reservoir and significant work was completed to strengthen and protect this area. Some of this work included water resistant walls to stop seepage, drainage systems to remove water, stability enhancements to reduce the upstream and downstream slopes, and the installation of rock berms to protect the upstream and downstream shorelines of the North Spur against erosion.

Monitoring to ensure dam safety

Ensuring that our dams and facilities are safe is critically important and we have a regular monitoring and surveillance program in place for the Muskrat Falls facilities including the upstream cofferdam and the North Spur dam. We've installed instruments and equipment within the Muskrat Falls dam structures to constantly monitor the facilities for movement, water pressure, water flow and seepage, temperature and any movements in slopes or foundations. In addition, the dam structures are regularly monitored and inspected as part of our Dam Safety Program. We also regularly patrol the river to observe ice and river bank conditions.

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Water levels upstream of the Muskrat Falls facility

We've had a few questions about lowering the water level in the reservoir to reduce the risk of landslides and to protect the stability of the North Spur. We recognize the concerns raised by people living downstream of the facility and understand that these concerns have been heightened by this recent landslide below the North Spur.

Lowering the water level in the reservoir would have no effect on water levels downstream of the Muskrat Falls facility. Also, lowering the water level in the reservoir upstream of Muskrat Falls could actually reduce the upstream river bank stability. By lowering the water levels, this would reduce the water pressure against the saturated river banks upstream of Muskrat Falls, which could decrease the stability of the banks and therefore increase the possibility of a landslide along the banks within the reservoir.

In the reservoir, the water level is currently at an elevation of around 23 m. We plan to stay at this level for the remainder of the winter.

For further information

Our Muskrat Falls Project website <http://muskratfalls.nalcorenergy.com/> has numerous reports on various topics relating to the project (refer to Newsroom/Reports).

More specifically, we've posted information on bank stability and previous study work in relation to this topic. One such report is the 2008 *Bank Stability Report* prepared by AMEC. This report includes a review of previous slide events, explanations of the various types of slide events and their triggers and commentary on expected conditions after river impoundment. Section 8.1 of the report discusses the conditions observed immediately downstream of the Muskrat Falls site, including observations of previous slides in the area where the most recent slide took place. Here is a link to that report: <http://muskratfalls.nalcorenergy.com/wp-content/uploads/2016/03/Ref-32-LCP-Bank-Stability-Study-2008.pdf>

Contact us

As part of our ongoing commitment to engage with stakeholders, we welcome further questions or comments about the Muskrat Falls Project.

CONTACT US

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