

Little Long Dam Safety Project

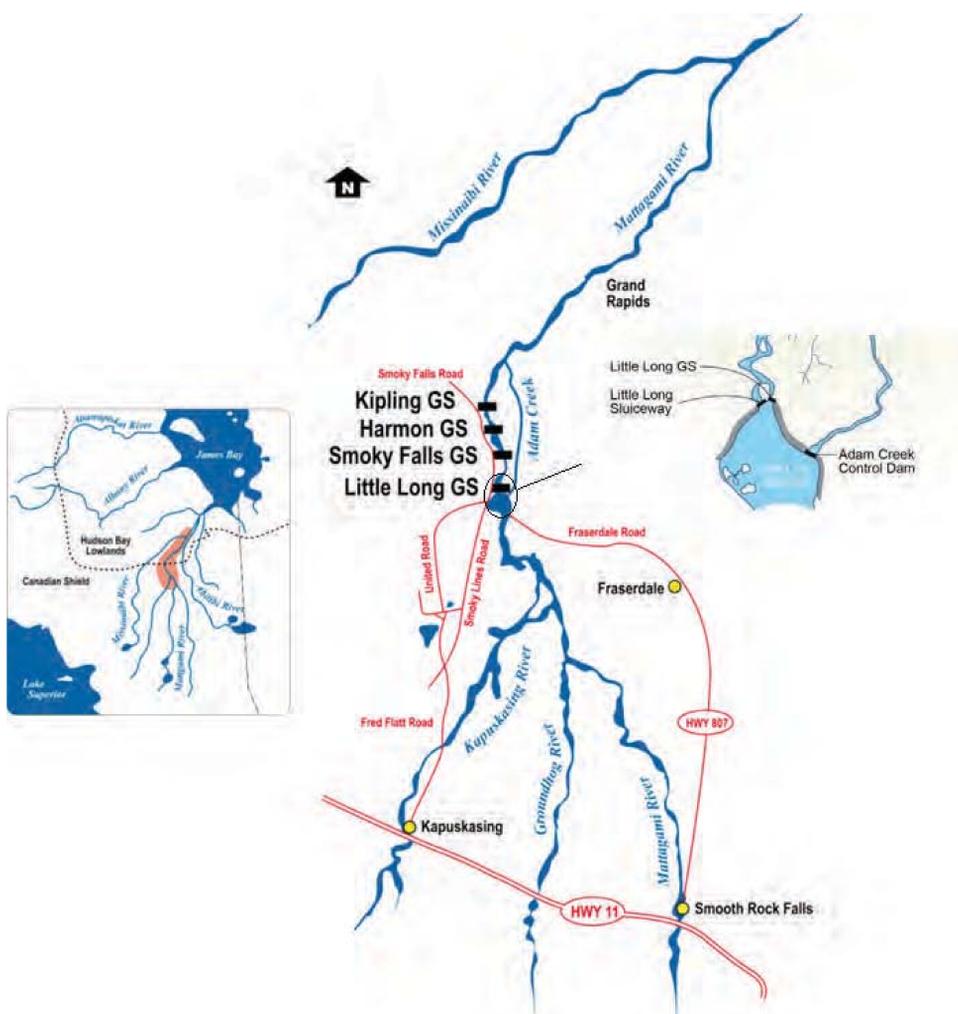
Benefits

The Little Long Dam Safety Project will allow OPG to meet dam safety legal requirements, help avoid infrastructure and operational impacts to the four generating stations on the Lower Mattagami River and reduce impacts to the environment in the event of a very large scale flood.

This project will also provide local employment and commercial opportunities.

What is OPG proposing to do?

The discharge capacity at the Adam Creek Sluiceway will be increased in order to safely pass a rare large flood type event. The proposed project will not result in changes to day-to-day water levels and flows for the Little Long Main Dam. *OPG will be adding more capacity to control the water but not more water.*



Little Long Dam Safety Project



Description

Additional gates will be added to the Adam Creek Sluiceway.

Preliminary engineering has been completed and the preferred concept is to add two gates to each side of the existing Adam Creek Sluiceway as shown below.



The Project will also require :

- upgrading the existing transmission line used to provide power to the Adam Creek Sluiceway.
- Construction of an upstream wall that will guide the flow into the new gates.
- Excavation downstream of the Adam Creek Sluiceway for energy dissipation and construction materials.

- Replacement of the seasonal safety boom with a permanent boom.

Some temporary construction facilities will be required to implement the project. These will likely include:

- A temporary barge landing located near the south east side of the Little Long Reservoir.
- Construction offices, security gates and laydown areas for equipment and materials.
- Construction camp north east of the Little Long Generating Station.
- Sediment Control Pond to reduce sediment in water before release back to the natural environment.



We are here today to answer your questions and listen to your comments and concerns.

Other ways to provide feedback:

- Comment Sheet
- Email christopher.lledo@opg.com

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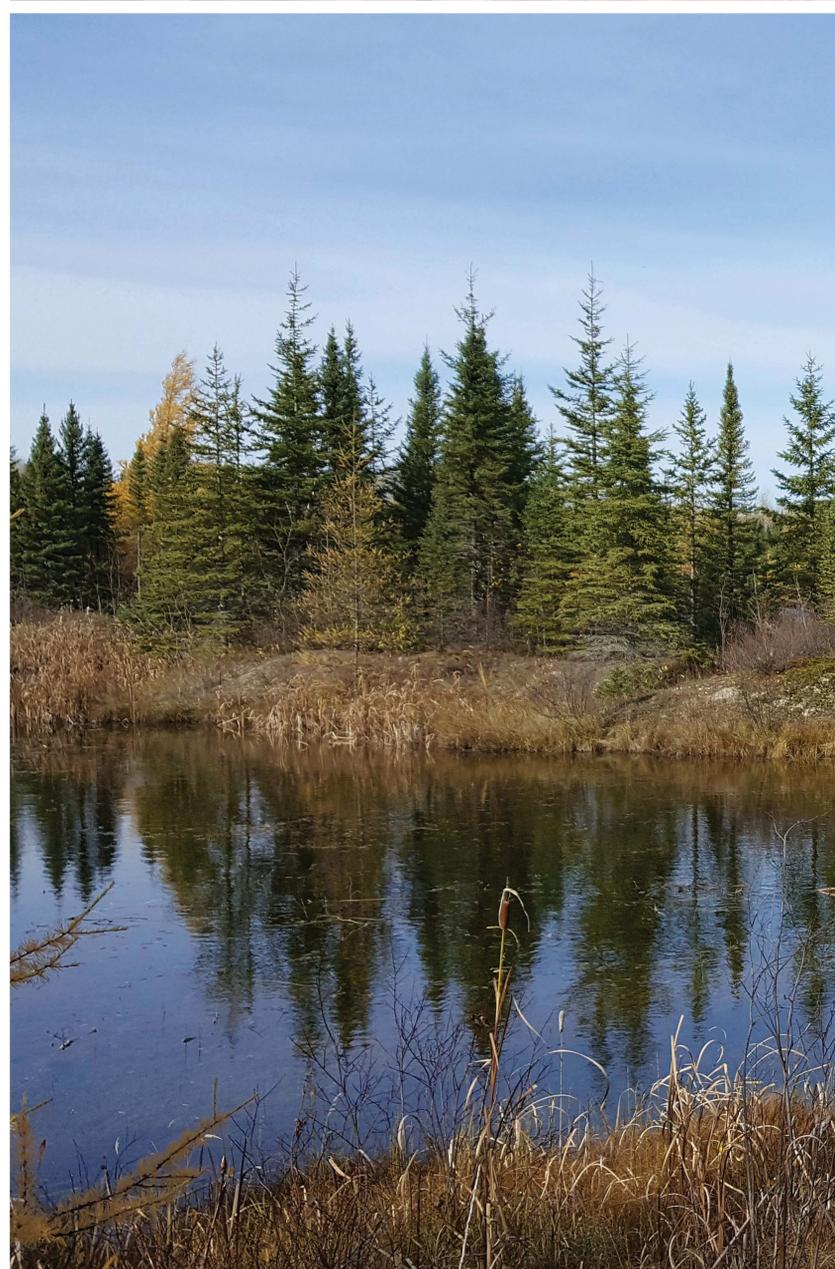
Cultural heritage and socio-economic considerations

Cultural heritage

- A Stage 1 Archaeological Assessment has been completed and has identified that the area was previously disturbed by the original construction of the Lower Mattagami Complex in the 1950s and 1960s.
- As the area was previously disturbed there is little potential for archaeological resources to be found and therefore construction can proceed with no further archaeological study.
- Should any archaeological resources be found during construction, work will be stopped in the immediate area and the find will be investigated.

Socio-economic considerations

- Adam Creek Sluiceway is a dangerous waterway area and as such there are no human uses that occur in the immediate area. Therefore, there will be no impact on human uses.
- In order for construction to occur, the Little Long Road over Adam Creek will need to be closed for the duration of the project. However, the Fred Flatt Road from Kapuskasing to the Lower Mattagami Complex area will remain open. In addition, controlled access to the existing boat launch may be required.
- The majority of this work will involve civil construction with the Project providing employment and contracting opportunities through the design build contractor.
- Please take a fact sheet to learn about employment and contracting processes.



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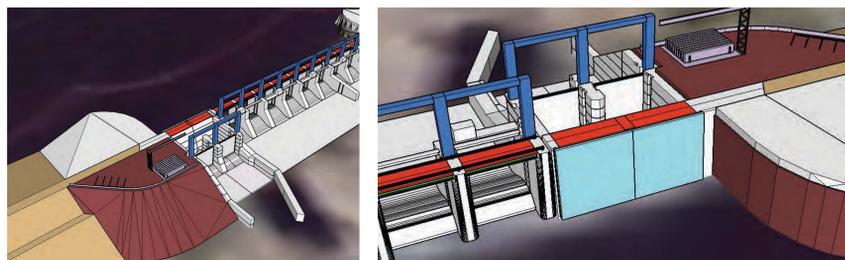
Environmental considerations

Minimizing/eliminating construction impacts

- A variety of environmental permits will be required for construction and include terms and conditions to protect the environment.
- As the project will occur in an area already disturbed by the original construction and on-going Adam Creek operations, the impact of construction activities to the natural environment will be negligible. However, areas that were originally disturbed but have become wetlands will be avoided.
- Project will be developed to minimize erosion during construction and prevent sediment laden waters from being discharged directly to Adam Creek.
- During construction OPG is committed to minimizing in-water work as much as possible. As a result, a large cofferdam is no longer required for the work as the existing sluiceway structure will be used to safely construct the new gates in the “dry”. Furthermore a bulkhead will be used to facilitate the removal of the existing structure when the new gates are constructed.



Steel Bulkhead



- Rock excavated from the area that will be used to provide energy dissipation and help minimize local erosion will be used for the project.
- An environmental management plan will be prepared and implemented for the construction period of the Project and will include permit terms and conditions.
- A site restoration plan will be implemented to ensure areas are restored appropriately. Some areas disturbed by the construction will remain as part of the infrastructure (i.e. parking, roads).

Lake Sturgeon entrainment and minimizing local erosion

OPG is exploring opportunities to address existing concerns within the vicinity of the Adam Creek Sluiceway. These are:

- Implementing top draw operations when sturgeon are expected to be in the reservoir. This would reduce the likelihood of Lake Sturgeon entering Adam Creek.
- Minimizing localized erosion by removing energy from the spilling operations. This will be done by excavating downstream of the Adam Creek Sluiceway structure. The excavation will also remove bedrock that may harm sturgeon during spilling operations.
- Lake Sturgeon relocation program in Adam Creek will continue to operate.

