



TORONTO

FLOOD AND EROSION INFRASTRUCTURE - PHYSICAL

# Black Creek Dam Spillway Modification



## OVERVIEW

Black Creek Dam's aging pipe outlet system is prone to debris accumulation, blockage, and operational failures, creating preventable flood risks and ongoing maintenance burdens. Replacing this outdated infrastructure with a modern notched weir will significantly improve reliability and reduce long term costs.

A notched weir provides a predictable, resilient, and low maintenance flow control system. This upgrade reduces the risk of operational failure during storm events, minimizes emergency interventions, and extends the dam's service life. It is a cost effective modernization with immediate safety and performance gains.

## OBJECTIVES

The outdated outlet system at Black Creek Dam causes frequent clogging and avoidable flood risk. Replacing it with a modern notched weir will improve reliability, reduce emergency response needs, and strengthen performance during storms. The objective is to modernize this key structure for safe, dependable flood control under changing climate conditions.

## BENEFITING STAKEHOLDERS

- City of Toronto
- Local surrounding communities

## EXPECTED IMPACT

- Reduction of overall maintenance costs
- Reduction of dredging costs

## BUDGET & FUNDING

### Estimated Total Cost (\$000's):

\$1,150 20% Engineering

80% Construction

### Possible Funding Sources:

- Water and Erosion Control Infrastructure Grant
- Disaster Mitigation Action Plan Grant
- Municipal Contributions

## OWNERSHIP

- TRCA



## KEY PRIORITIES AND ACTIVITIES TO DATE

### Upgrade Dam Outlet to Restore Flood Protection

High Priority



Annual cleaning of the trashrack has been suspended due to access issues and the amount of sediment and debris. The new spillway will address these issues and will make it easier and safer to adjust water levels before major storm events.

### Work to Date

- Completed dredging in 2017
- Installed new trashrack to allow debris to flush

## RISKS IF UNFUNDED

**Social:** If the dam's outlet continues to jam with sediment and debris, downstream communities face a higher risk of flooding during major storms. Reduced reservoir capacity can compromise public safety and erode community confidence in local flood-control infrastructure.

**Financial / Economic:** Persistent blockages will increase ongoing maintenance costs and raise the likelihood of expensive emergency repairs. If flood storage continues to decline, downstream property damage and infrastructure impacts could lead to significant financial losses.

**Deferred Action Risk:** Delaying upgrades will allow sediment buildup and outlet deterioration to worsen, making future restoration more complex and costly. Postponing action also prolongs the risk of reduced flood-attenuation performance during high-flow events.



## KEY DATES

- **Possible Start:** TBD
- **Duration:** 2 Years

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