



LID Monitoring Projects

Fletcher's Creek Pond 10 – Floating Treatment Wetlands

Background

Urban stormwater ponds have become a widely utilized method for the treatment of stormwater in the newer areas of the Credit Valley Watershed to prevent erosion and the transport of sediments to receiving watercourses. Although quite effective for the purposes of removal of coarse particles, these ponds are typically less effective at removing fine suspended particulates and nutrients. In addition, building ponds on cold water systems can lead to a dramatic increase in water temperature in receiving streams that often provide habitat for sensitive species such as Brook Trout and Redside Dace. Credit Valley Conservation along with other project partners has installed floating treatment wetlands in a stormwater pond in Brampton.

Location: Chinguacousy Road and Botavia Downs Drive, Brampton

LID Practices Implemented

- **Floating Treatment Wetlands** grow wetland plants (hydroponically) on a mat that is floated on the pond's surface. They are intended to enhance the treatment effect of conventional stormwater ponds by reducing the nutrient levels and the temperature of water discharging from the pond to Fletcher's Creek.





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Why are we Monitoring?

- We are evaluating the effectiveness of Vegetated Floating Treatment Wetlands in reducing the temperature of the water discharging from the pond to Fetcher's Creek.
- In future years, we will also look at the nutrient reduction capabilities of the floating wetlands.

What are we Monitoring?

- We are currently monitoring water temperature from June 1 to September 30 at the inlets and outlets, and throughout the pond.
- In future years, we will also monitor water flow and water quality entering and exiting the pond.



When did monitoring begin?

- Temperature monitoring and grab water quality samples at the inlets and outlet started in 2005 as part of CVC's Effectiveness Monitoring Program
- Temperature monitoring throughout the pond started July 2010

Who are the Partners?

- Credit Valley Conservation, The City of Brampton, C&M Aquatics, Greenland International Consulting Limited, Trent University, Queens University, & Flemming College.