

PROJECT TITLE: Evaluation of Floating Treatment Wetlands in Stormwater Ponds for the Reduction of Thermal Impacts

PROJECT DESCRIPTION

The **Pond 10** thermal mitigation study is a collaborative research initiative between C&M Aquatic Management Group Ltd, Credit Valley Conservation, Trent University, Queens University, The Center for Alternative Wastewater Treatment, Greenland International Consultants Ltd., Toronto & Region Conservation Authority, Central Lake Ontario Conservation Authority and Environment Canada (project advisors). The main objective of the project is to evaluate the effectiveness of Floating Treatment Wetlands (also called Floating Islands) for reducing the temperature of water discharged from stormwater management ponds.

Description of Facility:

- 2 celled stormwater management pond, North Brampton, Ontario



MAIN TREATMENT OBJECTIVES:

- Reduction of pond effluent temperature
- Reduction of nutrient concentrations (Nitrogen & Phosphorous)
- Observation of wetland plant survival on FTW platform
- Testing of goose deterrent systems

Island Description:

- 6 rectangular modules (18x68ft)
- Total island footprint (7,344 sq ft)
- Modules constructed of recycled post-industrial polyethylene foam boards (2 inch thickness)
- Modules seeded with mix of 30 species of native wetland vegetation
- Modules fitted with goose deterrent fencing
- Anchored using helical earth anchors and stainless steel cable

Project Results:

Our islands have been successfully established with a mix of wetland vegetation. Ongoing water quality analysis will provide information on treatment efficacy

For more information Contact C&M at: info@cmaquatics.com

Project Photographs:



Photograph 1 – Fall 2010, 1 month post installation



Photograph 2 – Late summer 2011

Project Reference:

Available upon request



Credit Valley Conservation



*The Centre for Alternative
Wastewater Treatment*