

This project was provided partial funding through the Lake Huron/Georgian Bay Framework for Community Action to increase the capacity of local organizations, engage the community, and turn local interests and concern into environmental action consistent with 'Framework' principles – see www.lakehuroncommunityaction.ca

### **Project Synopsis**

PROJECT TITLE: Nottawasaga Watershed Improvement Program (N-WIP), 2015-2016

**RECIPIENT:** N-WIP Steering Committee and Nottawasaga Valley Conservation Authority (NVCA) (<a href="https://www.nvca.on.ca">www.nvca.on.ca</a>)

#### PROJECT GOALS AND OBJECTIVES:

To improve the health of the Lower Nottawasaga River and Southern Georgian Bay by working with local communities to complete water quality improvement projects on Wasaga Beach and Collingwood area tributary streams.

### **PROJECT PARTNERS**:

N-WIP Steering Committee, local landowners, area schools, agricultural associations, environmental associations, private businesses, Environment Canada, Province of Ontario, local municipalities and NVCA.

**PROJECT LENGTH:** 12 Months

### **PROJECT SUMMARY:**

The 2015-16 portion of this ongoing community action program has targeted implementation of 4 stream-side tree planting projects and 2 stream habitat restoration projects designed to integrate the engagement of volunteers from several different sectors.

Community volunteers, environmental interest groups and local highschool students planted 1,480 tree seedlings adjacent to Lamont, Black Ash and Willow Creeks and the Nottawasaga River as part of 5 different engagement events hosted in May of 2015. Partners in this work included the Collingwood Collegiate Institute, Stayner Collegiate Institute, Friends of Sadie, Blue Mountain Watershed Trust, Georgian Triangle Anglers, RJ Burnside and Associates, Crozier and Associates, Nottawasaga Futures, Town of Collingwood and the Townships of Clearview, Essa and Springwater.

At the Pine River site in the community of Angus, an innovative environmental restoration project was initiated in August 2015. This project involved the construction of a new 50m long stream channel designed to maintain the Pine River within a healthy shaded forested corridor.



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This initiative also served to bypass an 80m long eroding bank adjacent to a municipal soccer field that contributed an estimated 33kg of phosphorus per year into the river. The new stream channel in the forest provides enhanced coldwater stream habitat for trout and salmon, while the former stream channel that has been bypassed will be restored as an oxbow wetland.

The initial phases of the stream channel construction work were completed by a heavy machinery contractor (see below) with follow up work being completed by community volunteers and highschool students who will be involved with complementary stream bank stabilization and revegetation. In September and October, volunteers will be using cut invasive Scots Pine trees harvested for the stabilization works and installing them along the stream banks "shingle-fashion" using soil anchors. In November, volunteers will be harvesting and installing dormant live willow and dogwood cuttings and installing them along the banks of the new stream channel in order to enhance soil stability and stream-side habitat diversity.



Figure 1: New River Channel Construction at Pine River 2015 (photo Courtesy of Roger Klein, CTV News)

Ten students from St. Joseph's Catholic Highshool started the volunteer-based bank stabilization work on October 7. The St. Joseph's students installed 50 2m long scots pine trees and protected 25m of riverbank. Other partners in this initiative include the Essa Healthy Communities Committee, Essa Township, South Simcoe Streams Network, Nottawasaga Futures, Province of Ontario and Environment Canada.



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Figure 2: St. Joseph's Catholic Highschool Students Stabilizing Bank on Pine River

Two additional environmental enhancement projects are also considered for implementation with community volunteers in the fall of 2015. One of these involves the removal of debris jams that are currently creating stagnant impoundments on Lamont Creek at the Clearview Township ECO Park property. Removal of the debris jams would reduce summer warming of flows and restore gravel beds for fish spawning in this rainbow trout nursery habitat.

The second project being considered would involve the installation of live willow and dogwood cuttings along Black Ash Creek in Collingwood and would represent an enhancement to the 275m long bank stabilization project completed in the fall of 2014 and winter of 2015. A third N-WIP Project currently proposed for this fall involves the construction of a 30m long bank stabilization wall to be constructed in the lower Nottawasaga River at Wasaga Beach, using boulders and live vegetation. The goal of this demonstration project is to provide local landowners with an alternative to the use of metal sheet pile walls for stabilizing sandy soils impacted by erosive forces caused by boat wakes.

#### **ACCOMPLISHMENTS:**

- Coordinated bus tour of 2015 stream restoration sites with N-WIP Committee and partners on June 4<sup>th</sup>
- Constructed new 50m long stream channel for Pine River in Angus
- Planted a total of 1,480 tree seedlings along stream corridors working with volunteers
- Stabilized 25m of eroding stream bank on the Pine River working with highschool students



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#### **NEXT STEPS:**

Continue to deliver the program's current implementation plan for one more year while identifying and designing new strategic projects for the future.

### POTENTIAL FOLLOW-UP PROJECTS:

- Decommissioning Petun Dam in Headwaters of Black Ash Creek where the stagnant head pond behind the dam currently impacts water quality and trout habitat downstream from the dam
- Plug 2 breaches in bank of Mad River, which are currently diverting over 50% of flow out of the channel and negatively impacting about 12km of river habitat