



Lower Trent Conservation

2016 PROGRESS REPORT

August 31, 2016

This Progress Report provides a summary of the achievements accomplished by Lower Trent Conservation between January and August of 2016. Progress on Business Plan priorities, everyday business, and emerging opportunities are reported.

ENVIRONMENTAL PLANNING & REGULATIONS

The *Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses Regulation (Ontario Regulation 163/06)* gives Lower Trent Conservation the responsibility to regulate development and activities in or adjacent to river or stream valleys, shorelines of lakes and bays, watercourses, hazardous lands, and wetlands. We also provide comments to our municipalities regarding natural hazards and natural heritage features on *Planning Act* applications.

By reviewing applications for activities near these sensitive areas, Lower Trent Conservation can ensure that development will not be impacted by flooding or erosion, and that new development does not aggravate flooding upstream or downstream.

This includes discussion of development proposals with landowners, developers, and municipal staff; conducting site inspections; compiling environmental information and creating maps; drafting comments; enforcing the *Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses Regulation (Ontario Regulation 163/06)*; landowner negotiations; and legal proceedings.

Planning & Regulations Stats

- ✓ Commented on 143 planning applications, including 9 subdivision files, 46 zoning by-law amendments, 75 severances, 4 minor variances, 8 site plans, & 1 official plan amendment
- ✓ Provided site specific advice regarding environmental & hazard land constraints to 400 residents
- ✓ Conducted 150 site inspections to support planning & regulations reviews
- ✓ Approved 100 permits under LTC's regulation
- ✓ Conducted enforcement investigations related to 20 violations.



Planning & Regulations Site Visit

Accomplishments on 2016 Priorities

- Completed Lake Ontario shoreline hazard mapping
- Lower Trent Conservation's Regulations & Procedures Manual updates approved by Board of Directors

ENVIRONMENTAL MONITORING & REPORTING

Lower Trent Conservation participates in provincial monitoring programs that contribute to knowledge of our local watershed and provincial databases.

Through the Provincial Groundwater Monitoring Network Program (PGMN), Lower Trent Conservation collects groundwater water quantity and quality data at 11 sites. Nine surface water quality sites are sampled monthly through the ice free season through the Provincial Surface Water Quality Monitoring Program (PWQMN). For the past several years, Lower Trent Conservation has participated in the Provincial Biocriteria Project to help describe normal ranges of biological conditions. The Low Water Response Program is triggered during times of below normal precipitation.

In addition to these programs, each spring Lower Trent Conservation samples benthic macroinvertebrates, which are small bugs that live in the bottom of streams and are indicators of water quality, and installs temperature probes in local streams to monitor water temperature through the growing season.

Lower Trent Conservation uses this information to help establish priorities for protection and rehabilitation activities, and to produce a Watershed Report Card every five years.

Accomplishments on 2016 Priorities

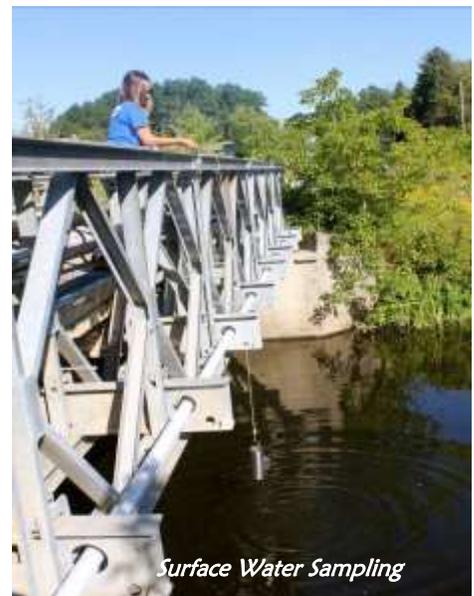
- Obtained funding commitment from Township of Alwick/Haldimand and initiated discussions with Township of Cramahe to re-survey Lake Ontario erosion monitoring stations



Benthic Sampling

Environmental Monitoring Stats

- ✓ Monthly measurements of groundwater levels at 11 PGMN well sites
- ✓ Collected 54 water quality samples from 9 PWQMN sites
- ✓ Collected benthic macroinvertebrate samples from 21 sites
- ✓ Sampled 7 sites for the provincial Biocriteria project
- ✓ Installed 30 temperature probes – removed 2 due to low water
- ✓ Low Water Response Level 2 conditions in July & August – communications to municipalities and residents to decrease water use by 20%



Surface Water Sampling

FLOOD FORECASTING & PROTECTION WORKS

Lower Trent Conservation, in cooperation with local municipalities and the provincial government, plays a key role in reducing the risk of property damage and loss of life from natural hazards such as flooding.

Weather forecasts and water conditions along the region's waterways are monitored daily, as part of a flood forecasting and warning system, in order to provide the earliest possible notification to municipalities and the public of the potential for flooding. During times of potential flooding, Lower Trent Conservation maintains communications with municipalities, Ministry of Natural Resources and Forestry, Trent-Severn Waterway, and neighbouring conservation authorities.

In addition, 10 flood control structures, including a dam, flood walls, berms, weirs, and overflow channels, have been constructed to help protect existing development in flood susceptible areas from potential damages resulting from a flood. The structures were constructed with the aid of the Province of Ontario and local municipalities on a cost-sharing basis. Staff conduct annual inspections of the structures to ensure they are safe and functioning properly.

Accomplishments on 2016 Priorities

- Discussions with Municipality of Trent Hills to undertake maintenance on Trout Creek to improve conveyance capacity in 2017



Flood Forecasting Stats

- ✓ Issued 11 bulletins regarding high water level concerns
- ✓ Conducted daily risk assessments for flood forecasting
- ✓ Conducted 7 snow surveys at 4 snow sampling sites

EDUCATION, OUTREACH, AND STEWARDSHIP

Through our education & outreach programs and activities, we strive to engage residents in environmentally sustainable behaviours and draw attention to environmental issues.

Our staff participated in 9 local community events with displays, demonstrations and conservation information, and spoke on environmental topics at 8 special interest group/club meetings.

Lower Trent Conservation offers two significant youth education programs.

Quinte Children's Water Festival is a two-day outdoor event with ~35 activity centres providing students from Grade 3-5 with interactive learning opportunities related to water. Nine hundred, thirty-one students, chaperoned by 92 teachers & parents, participated in the 7th Quinte Children's Water Festival on May 26 & 27. High school students, partner agency staff and volunteers donated over 1300 hours of time.

Caring for our Watersheds asks Grade 7-9 students to answer the question "What Can I Do to Improve My Watershed". Fifty-eight proposals from 111 students were submitted for the Caring for our Watersheds contest in 2016. Over \$10,000 in cash prizes was awarded to students and schools at the Celebration Event on April 21.

Lower Trent Conservation staff provide advice and assistance to adopt good stewardship practices through the Healthy Lands – Clean Water Program and the Tree Seedling Program. Site visits are conducted to provide residents with advice on the stewardship of their property and incentives to implement selected best management practices. Tree seedlings are provided to landowners at cost through our over the counter tree seedling program.

Accomplishments on 2016 Priorities

- Re-designed the Healthy Lands - Clean Water Program brochure, developed new content for website, and incorporated new project categories
- Submitted 9 potential restoration projects on the Oak Ridges Moraine as required by Conservation Authorities Moraine Coalition project work plan
- Continued involvement with Water Soldier interagency working group, provided communications support, and assisted with monitoring
- Installed a rain gauge at the administration office and purchased 10 to distribute to volunteers to collect precipitation information in the watershed



Who have we reached?

- ✓ Over 1300 youth were involved in our education activities
- ✓ Our staff reached over 1700 people at 20 community events
- ✓ Landowners planted 15,240 trees through our tree seedling program
- ✓ 300 people participated in our outreach events
- ✓ Our staff conducted 4 Healthy Land – Clean Water site visits

DRINKING WATER SOURCE PROTECTION – LOCAL IMPLEMENTATION

The Trent Source Protection Plan was effective on January 1, 2015. Since then, the focus of the program has been on providing support to municipalities and other implementing bodies with implementing the policies of the source protection plan.

We continue to fulfil our role and responsibilities as a member of the Trent Conservation Coalition Source Protection Region (Crowe Valley, Ganaraska Region, Kawartha, Lower Trent, and Otonabee).

Lower Trent Conservation has agreements with 5 municipalities (Alnwick/Haldimand, Brighton, Cramahe, Stirling-Rawdon, and Trent Hills) to provide Risk Management services. The Risk Management Official/Inspector is required to implement and enforce policies that use Part IV procedures of the *Clean Water Act* including Risk Management Plans, Prohibition, and Restricted Land Use.

Lower Trent Conservation also delivers a Source Protection Education & Outreach program on behalf of 6 municipalities (Alnwick/Haldimand, Brighton, Cramahe, Quinte West, Stirling-Rawdon, and Trent Hills).

Accomplishments on 2016 Priorities

- Completed 12 Risk Management Plans;
- Continued to deliver a Source Protection Education & Outreach program on behalf of our local municipalities including door-to-door contact in 7 communities and attending 6 community events
- Continued to provide ongoing assistance to municipalities with developing Source Protection planning policies and other implementation initiatives
- Completed Risk Management Official annual report and assisted the municipalities with their annual reports by the required deadline of February 1

New Agreements

- ✓ Entered into agreements to deliver a Source Protection Education & Outreach program on behalf of our local municipalities
- ✓ Initiated establishment of new Risk Management Services agreement with local municipalities for 2017-2019.



Quinte Home Show 2016



Source Protection Road Sign



Source Protection Banner

CONSERVATION LANDS

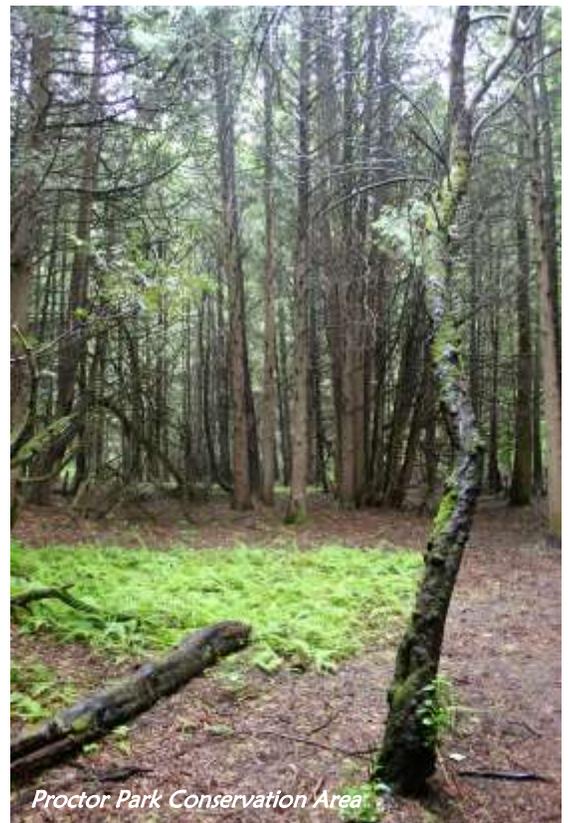
Lower Trent Conservation owns 1,540 hectares of natural open space. These forests, valleys, meadows, and wetlands are part of a regional system of protected areas that depict the natural diversity of the region. They are special places in the watershed that are protected from development, where the natural world comes first.

There are 17 properties ranging in size from small parkettes to over 650 hectares. Ten properties are classified as Conservation Areas and provide venues for healthy, active lifestyles such as hiking, bicycling, fishing, canoeing, and other recreational activities to residents and tourists. These properties require ongoing maintenance of sites, trails, and other facilities such as parking lots, privies, boat launches, picnic shelters, and the Goodrich-Loomis Conservation Centre.

The other 7 properties are Natural Habitat Areas which, while they are open to the public, are left in a natural state with no maintained trails or recreational activities.

Accomplishments on 2016 Priorities

- Completed parking area re-alignment to discourage the dumping of garbage and surface upgrades to improve accessibility to picnic shelter at Glen Miller Conservation Area
- Completed an assessment of the accessibility of Trenton Greenbelt Conservation Area
- Decommissioned the privy at King's Mill Conservation Area
- Completed a plan for road signs for Conservation Areas and initiated sign replacement



CORPORATE SERVICES

Corporate Services is an important part of day-to-day operations and provides support to all Lower Trent Conservation programs. This includes management of our finances, human resources and other assets, as well as program planning and development, customer relations, partnership building, information management and Geographic Information System, and marketing & communications.

Accomplishments on 2016 Priorities

- A system to facilitate online payment of LTC fees is in the development stages
- LTC Freedom of Information & Protection of Privacy Policy & Procedures Manual was updated and approved by the Board
- A salary review has been initiated and reviewed by a subcommittee of the Board
- Research regarding establishment of a foundation for Lower Trent Conservation is underway and is to be considered as part of the Fund Development Strategy
- An Information Technology Asset Management Plan is in progress
- Support obtained from Municipality of Trent Hills to initiate process of revising LTC's northern watershed boundary to include all of Trent Hills not in conservation authority jurisdiction
- A new corporate publication that highlights LTC's role, programs, and services has been designed.



Highlights

- ✓ Received anonymous donation of \$100,000 per year for 2016 and next 2 years to support Education Programs and Fundraising
- ✓ Developed a Draft Fund Development Strategy
- ✓ New online services (i.e., property inquiry & map viewer) added to the Environmental Planning & Permits section of the website
- ✓ Distributed 17 Mainstream E-News & 16 Press Releases
- ✓ Filled 5 contract & 7 summer student positions
- ✓ Engaged 19 volunteers who provided 260 hours of assistance to 7 projects

PARTNERSHIP PROGRAMS

REGIONAL DRINKING WATER SOURCE PROTECTION

As the lead Source Protection Authority for the Trent Conservation Coalition Source Protection Region (which includes Crowe Valley, Ganaraska Region, Kawartha, Lower Trent, Otonabee Authorities and areas within the Trent River watershed in Peterborough), we were responsible for coordinating the development of source protection plans for the region. The Trent and Ganaraska Source Protection Plans were approved in October 2014 and effective as of January 1, 2015.

The current focus is on supporting municipalities, partner conservation authorities, and other implementing bodies with implementation of source protection plan policies.

BAY OF QUINTE REMEDIAL ACTION PLAN

The Bay of Quinte was designated an Area of Concern in 1985 by the International Joint Commission under the *Great Lakes Water Quality Agreement* between Canada and the United States. The environmental concerns included excess nutrients, persistent toxic contamination, bacterial contamination, and the loss or destruction of fish and wildlife habitat. A Remedial Action Plan (RAP) is the response of government, industry, and the local community to address the Beneficial Use Impairments (BUI) and remove the Area of Concern designation.

Lower Trent Conservation provides the local administration of the Bay of Quinte Remedial Action Plan which includes communications and technical support aimed at the clean-up of the Bay. Lower Trent Conservation also co-chairs the Restoration Council. The Restoration Council includes agencies from all levels of government, as well as local representatives, who have come together to implement the Remedial Action Plan.

In 2016, the focus is facilitating BUIs that are ready to have their Area of Concern designation removed through the approvals process, including ensuring opportunities for the public to provide input. A discussion paper on a proposed Phosphorus Reduction Strategy is scheduled to be released for input in the fall of 2016.

Drinking Water Source Protection Highlights

- ✓ 3 new members appointed to the Source Protection Committee
- ✓ Submitted an update under Section 36 of the *Clean Water Act* to the Ministry of the Environment and Climate Change to include water quantity policies in a small portion of the Kawartha-Haliburton Source Protection Area
- ✓ Revitalized the Trent Conservation Coalition website including an interactive map
- ✓ Completed Trent Conservation Coalition's 2015 Implementation Summary Report

Bay of Quinte Remedial Action Plan Highlights

- ✓ Submitted re-designation reports for fish tumours & other deformities and restrictions on dredging to Environment Canada and the Ministry of the Environment and Climate Change for approval
- ✓ Continued delivery of on-the-ground stewardship programs to educate and provide local residents with incentives to take action to improve water quality and habitat in the Bay