



# Lower Trent Conservation 2017 PROGRESS REPORT

*This Progress Report provides a summary of the achievements accomplished by Lower Trent Conservation between January and September of 2017. Progress on Business Plan priorities, everyday business, and emerging opportunities is 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 167 planning applications, including 17 subdivision files, 11 site plans
- ✓ Provided site specific advice regarding environmental & hazard land constraints to 553 inquiries
- ✓ Approved 207 permits under LTC's regulation
- ✓ Responded to 21 legal requests
- ✓ Conducted 160 site inspections to support planning & regulations reviews
- ✓ Conducted enforcement investigations related to 30 violations.



## 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 (Stream) 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 2017 Priorities

- Consulted with surveyors regarding logistics of re-surveying of Erosion Monitoring Stations on Lake Ontario shoreline (Alnwick/Haldimand, Cramahe)
- Data analysis initiated for 2018 Watershed Report Card

### Environmental Monitoring Stats

- ✓ Monthly measurements of groundwater levels at 12 wells at 11 PGMN well sites
- ✓ Collected 63 water quality samples from 9 PWQMN sites
- ✓ Collected benthic macroinvertebrate samples from 20 sites
- ✓ Installed 30 temperature probes



## 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 2017 Priorities

- Launched a volunteer rain gauge network

### Flood Forecasting Stats

- ✓ Issued 21 bulletins regarding high water level concerns
- ✓ Conducted daily risk assessments for flood forecasting
- ✓ Conducted 11 snow surveys at 4 snow sampling sites



*Staff Gauge – Water Levels*



*King's Mill Gauge Station*

## EDUCATION AND 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.

*Tri-County 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, twelve students, chaperoned by 89 teachers & parents, participated in the 8<sup>th</sup> annual Children's Water Festival on May 25 & 26. 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-two proposals from 108 students were submitted for the Caring for our Watersheds contest in 2017. Over \$10,000 in cash prizes was awarded to students and schools at the Celebration Event on April 19.

### Accomplishments on 2017 Priorities

- Rebranded Water Festival to Tri-County Children's Water Festival
- Created a packaged youth education program - Connecting Kids with Nature - with four main categories: Tri-County Children's Water Festival, Caring For Our Watershed, Stream of Dreams (new for 2017) and In-class Environmental Programming
- Experienced 60% increase in the number of people reached through outreach activities over last year (2016) and participated in 5 additional events

### Who have we reached?

- ✓ Over 1850 youth were involved in our education activities
- ✓ Our staff reached approximately 3800 people at 25 community events
- ✓ 200 students at Stockdale Public School participated in our first Stream of Dreams program
- ✓ Tripled number of participants for our Family Water Festival at Proctor Park Conservation Area



## STEWARDSHIP

Lower Trent Conservation staff provide advice and assistance to adopt good stewardship practices through the Healthy Lands – Clean Water Program. Site visits are conducted to provide residents with advice on the stewardship of their property and incentives to implement selected best management practices.

To encourage tree planting and reforestation of private lands, Lower Trent Conservation provides tree seedlings to landowners at cost through our over the counter tree seedling program.



### Highlights

- ✓ Landowners planted 16,100 trees through our tree seedling program
- ✓ Our staff conducted 7 Healthy Land – Clean Water site visits
- ✓ Received funding from the Great Lakes Guardian Community Fund and initiated work on a planting project on Trenton Greenbelt Conservation Area
- ✓ Ran a Rain Barrel Sales Event and sold 185



## 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).

### Highlights

- ✓ Completed 5 Risk Management Plans and issued 10 Section 59 Notices
- ✓ Outreach through door-to-door contact in 7 communities and attendance at 10 community events
- ✓ 4 Source Protection 'Nature Notes' produced
- ✓ Completed Risk Management Official annual report and assisted municipalities with their annual reports by the required deadline of February 1



*Source Protection Road Sign*



## 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 2017 Priorities

- Completed the renewal of Forest Management Plans to support Managed Forest Tax Incentive Program
- Received final engineering assessment of picnic shelter at Proctor Park Conservation Area
- Updated signage at Proctor Park Conservation Area
- Renewed agreement with school board for rental of Goodrich-Loomis Conservation Centre

### Highlights

- ✓ Upgraded dock at Glen Miller Conservation Area
- ✓ Added new picnic tables and new donation boxes at strategic locations in the Conservation Areas
- ✓ Repaired trail sections in Trenton Greenbelt Conservation Areas that were damaged due to flooding



*Proctor Park – new signage*



*Goodrich-Loomis Conservation Centre*

## 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 2017 Priorities

- Prepared draft Personnel Policy for Board of Directors review
- Reviewed and updated Governance & Administrative Policies & Procedures
- Developed a plan for celebration of Lower Trent Conservation's 50th anniversary in 2018
- Prepared Draft Strategic Plan for release in 2018
- Undertook Fund Development initiatives (e.g., Donor Information Package, Giving Tree to recognize donors, grant applications, donor requests)
- Initiated measures to comply with Canada's Anti-Spam Legislation



### Highlights

- ✓ Received anonymous donation of \$100,000 to support Education Programs and Fundraising
- ✓ Distributed 40 Mainstream E-News & 14 Press Releases
- ✓ 7 summer student hired to assist with various programs
- ✓ Engaged 23 volunteers who provided 187 hours of assistance to 10 projects
- ✓ Created "Nature Notes", a weekly radio feature & podcast being delivered on 91.3 CJLX-FM radio to build awareness and promote fund development
- ✓ \$41,000 raised in donations and grants

## 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.

The current focus of the Bay of Quinte Remedial Action Plan is ensuring actions are completed and facilitating the BUIs through the process of having their Area of Concern Designation removed.

### Drinking Water Source Protection Highlights

- ✓ Prepared Draft Trent Conservation Coalition 2016 Implementation Summary Report
- ✓ Participated in 2 day Ministry of the Environment and Climate Change led Source Protection Information Exchange for the Trent Conservation Coalition Source Protection Region Program
- ✓ Received Gold Award from Urban Regional Information Systems Association – Ontario Chapter for interactive map
- ✓ Website improvements including transport pathways page and data available for download

### Bay of Quinte Remedial Action Plan Highlights

- ✓ Fish tumours and other deformities and restrictions on dredging BUIs were re-designated as 'not impaired'
- ✓ Public input was obtained on the 'not impaired' status of the following BUIs: degradation of fish and wildlife populations; degradation of benthos; and loss of fish and wildlife habitat.