Toronto & Region Remedial Action Plan

Update on Actions 2013-2014

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The Toronto and Region Remedial Action Plan is managed by representatives from Environment Canada, Ontario Ministry of the Environment, Ontario Ministry of Natural Resources and Toronto and Region Conservation Authority.

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Background and Communications

Toronto and Region is one of 43 locations on the Great Lakes which were identified as suffering from degraded environmental conditions. These locations are referred to as Areas of Concern, and each Area of Concern is required to implement a Remedial Action Plan to address environmental issues. Currently 5 of the 43 Areas of Concern (AOCs) have successfully completed their Remedial Action Plans.

The Toronto and Region Area of Concern consists of six watersheds encompassing 2000 km^2 of land and 43 km of waterfront, and its Remedial Action Plan (RAP) is currently in the implementation stage. During implementation, remedial actions are undertaken and environmental progress is measured. The *Toronto and Region Remedial Action Plan: Update on Actions 2013-2014* reports on research and implementation projects that, as of 2013-2014, joined the roster of programs and projects that receive RAP support.

Descriptions of ongoing or recently completed projects that were in receipt of RAP support can also be found online in the documents *Toronto and Region Remedial Action Plan: Update on Actions 2007-2010, Toronto & Region Remedial Action Plan: Update on Actions 2011-2012 and Toronto & Region Remedial Action Plan Update on Actions: 2012-2013 at www.torontorap.ca*.

Projects outlined in this document received RAP support in 2013-2014 and helped improve water quality, promoted sustainable land use practices, improved habitat quality, assessed fish and wildlife populations, and restored the environmental conditions that led to the Toronto Region being designated as an AOC.

For additional information on new or ongoing RAP projects contact the Toronto and Region RAP Project Manager at:

Toronto and Region RAP Project Manager
5 Shoreham Drive
Downsview, ON

Lake Ontario Evenings

Since its 2009 launch, the Lake Ontario Evening Speaker Series has been a resounding success. These events have brought together diverse, standing-room only crowds to learn from, and share ideas with, the individuals and organizations working at the forefront of environmental challenges in Toronto and Region, Lake Ontario, and the Great Lakes as a whole.

The Lake Ontario Evenings event themes have included:

- Great Lakes Water Diversions (2009)
- Biodiversity (2010)
- The Lake Ontario Nearshore (2010)
- Environmental Contaminants (2010)
- Geology, Landscape, and Water (2011)
- Beach Water Quality (2011)
- Toronto Fish and Fish Habitat (2011)
- Drinking Water Source Protection (2012)
- The Urban Angling (2012)
- Tommy Thompson Park (2012)
- Food Webs (2013)
- Weathering the Storms (2014)
- Hidden Secrets of the Lake (2014)

The Remedial Action Plan team has committed to continuing the Lake Ontario Evening Speaker Series through 2014-2015. Keep an eye on www.torontorap.ca for event listings and details.

www.torontorap.ca

Update on aesthetics

Beneficial Use Impairment Reports

A "Beneficial Use Impairment" (BUI) is a term that describes the environmental issues around which the Remedial Action Plan is structured. Beneficial Uses are human or ecological uses or qualities of the ecosystem, and these uses are considered "Impaired" when the Beneficial Use has been lost or damaged as the result of poor environmental quality.

Remaining Beneficial Uses in the Toronto and Region Area of Concern that are classified as impaired:

- *Restrictions on fish and wildlife consumption*
- *Degradation of fish and wildlife populations*
- *Eutrophication or undesirable algae*
- *Beach closings*
- *Degradation of aesthetics*
- *Loss of fish and wildlife habitat*

Remaining Beneficial Use Impairments that Require Further Assessment:

- *Degradation of phyto- and zooplankton populations*

RAP Aesthetics Update

Degradation of aesthetics is one of 11 Beneficial Use Impairments that was identified as impaired within the Toronto Area of Concern in 1989. The aesthetics concern related mainly to debris and litter along watercourses, weed growth along the western shoreline and turbidity near river mouths.

The aesthetics BUI is challenging to assess in a quantifiable manner. An aesthetics monitoring program was launched in 2012 in conjunction with the Toronto and Region Conservation Authorities regular field monitoring as part of the Regional Watershed Monitoring Program. This program was continued into 2013 so that the entire Toronto and Region Area of Concern would be intensively sampled.

In 2013 the Mimico, Don, and Highland watersheds were intensively sampled. Overall 917 aesthetic records were collected at 262 sites across the Toronto and Region Area of Concern, with over 98% of the sites having no debris, odour, or turbidity reported. The small percentage of sites with poor aesthetics scores were located in watercourses with 'fast' currents close to roads where erosion and resuspension of sediment due to the fast flowing water lead to the low aesthetic scores.

2014-2015 will be the last year of monitoring, after which all of the watersheds within the Toronto and Region Area of Concern will be have been intensively monitored. A comprehensive report detailing the findings will be released in 2015 along with a determination on whether degradation of the aesthetic quality of water within the AOC can be redesignated as 'not impaired' .

Clean Waters

Alternative Road Salts Evaluation

In winter the use of road salts is ubiquitous in urban environments. Over 5 million tons of the salts are applied in Canada every year to prevent vehicle accidents and alleviate slip hazards. Unfortunately, salts also pose a hazard to the environment and accelerate corrosion of vehicles and infrastructure. A number of alternative less corrosive and environmentally benign salt products have become available over the last several years, however there is limited information on how well they perform relative to conventional alternatives. A RAP supported research study conducted by researchers from the University of Waterloo in partnership with TRCA/STEP compared the performance of three organic and semi-organic anti-icing products to conventional salt brine through a series of field tests. Pavement friction was used as the primary measure of performance.

Results showed that the organic and semi-organic anti-icers were at least as effective as regular salt brine, but with the added benefit of having much lower impact on the environment and infrastructure. When applied with traditional de-icing salts (as is common practice), slightly faster snow and ice melting was achieved than with conventional brines alone. The alternative products were also found to work well even at low application rates, making them more affordable than was previously believed. A more detailed analysis of product costs at recommended application rates will be developed in the near future.

Professional Education

Erosion of soils from construction sites contribute to poor water quality in streams and rivers. TRCA developed and launched the first in a planned series of e-learning courses and online tools. These tools are designed to provide much needed training for building and construction industry professionals who play a key role in protecting our water resources and sensitive environmental features. The first four courses will provide information related to new technologies, practices and approaches related to erosion and sediment control on construction sites and the design of low impact development measures. This new online format will allow TRCA to reach a much broader audience than is achievable through in-class workshops, and will allow people the flexibility and convenience to complete the courses as their schedules permit. The online courses can be accessed on The Living City Campus website at www.thelivingcitycampus/ca/workshops

Additionally, TRCA hosted a one-day erosion and sediment control workshop attended by approximately 50 construction contractors, including site supervisors, foreman and field staff; many of the attendees indicated this was the first formal training related to ESC they had ever attended! Based on feedback received at the workshop, TRCA is now working to transform the one-day course into a formal certification program for contractors.

Soil Management Best Practice Demonstration and Evaluation

Appropriate soil management during subdivision development may help to reduce runoff and create better quality planting evvironments for urban trees and gardens.

Through a partnership between the Sustainable Technologies Evaluation Program (STEP), Lake Simcoe Region Conservation Authority, York Region and Mosaik Homes several soil management best practices are being applied as part of construction of the 11.5 hectare Vales of Glenway subdivision in Newmarket. Field testing and monitoring will be conducted to evaluate the effectiveness of the soil management best practices. Specifications for improved topsoil stripping, storage, compost amendment and reapplication depth best practices were part of design and construction plans for the subdivision.

Work on the project has focused on construction of topsoil testing plots for evaluating the runoff reduction benefits of soil amendments to lawns and other landscaped areas. Four test plots were constructed at the Living City Campus at Kortright (9520 Pine Valley Drive, Vaughan) that receive roof runoff from a barn. A 4,000 litre cistern will be used to allow simulation of rainfall events of varying depth and intensity and the test plot sub-drain system will allow runoff reduction benefits of amended topsoil to be quantitatively evaluated. This information will provide insight into how best to model the runoff generation properties of newly constructed pervious landscaped areas where soil amendments have and have not been implemented, which is of interest to designers of stormwater management systems and approval agencies involved in review of their design.

A new partnership was formed between the Sustainable Technologies Evaluation Program (STEP) and a researcher in Soil Biology from the University of Guelph to assist with examining benefits of improved topsoil stripping and storage practices on the health of topsoil stored in stockpiles on urban construction sites. Through sampling and testing of topsoil from stockpiles of varying height and dimensions, several indicators including soil organism communities will be used to evaluate whether or not improved stripping and storage practices implemented at the Vales of Glenway development affect the quality and health of the topsoil. The stored soil will be reapplied to landscaped areas during their construction.

Watershed monitoring

Regional Watershed Monitoring Program

TRCA's Regional Watershed Monitoring Program (RWMP) focuses on the long-term collection of scientific data in order to tell the story of 'how healthy' the natural environment is across the Greater Toronto Area landscape. This knowledge serves to 'flag' potential impacts to the health of the region's watercourses, meadows, forests, and wetlands, and helps guide the prescription of 'best' conservation land management and restoration activities.

During the 2013-14 year RWMP monitoring programs produced the following results, which includes new advances and data discoveries:

Terrestrial Habitats and Communities

A new location for the Spotted Salamander was discovered in the lower reaches of an eastern watershed in 2013. This species is very sensitive and is generally no longer found in urbanized landscapes. Additionally the first documented record of Pickerel Frog was discovered in Peel Region in 2013 while conducting road kill surveys. These records combined with the 2013 data collected from 15 biological inventory sites (approx. 1000 hectares) and 160 long-term fixed plots add to our knowledge of regional biodiversity.

Fish Habitat and Communities

There was a noticeable decrease in the number of invasive Round Gobies captured at RWMP monitoring sites in the Etobicoke Creek and Humber River watersheds in 2013 compared to the 2010 sampling period. There is no evidence yet that these invasive fish are expanding their range upwards. Furthermore, of the 5792 fish sampled in 2013, no new invasive species were discovered across the 46 monitoring sites surveyed in these two watersheds.

Surface Water Quality

Elevated levels of chloride, copper, iron, E. coli, phosphorus and other contaminants were found at several surface water quality monitoring sites within the region in 2013. 5 new sites within the Etobicoke Creek watershed were added to the water quality sampling schedule, with a total of 46 sites surveyed monthly in 2013. This data will be highlighted in the up-coming 2013 Surface Water Quality Summary as well as contribute to the 2016 Living City Watershed Report Card.

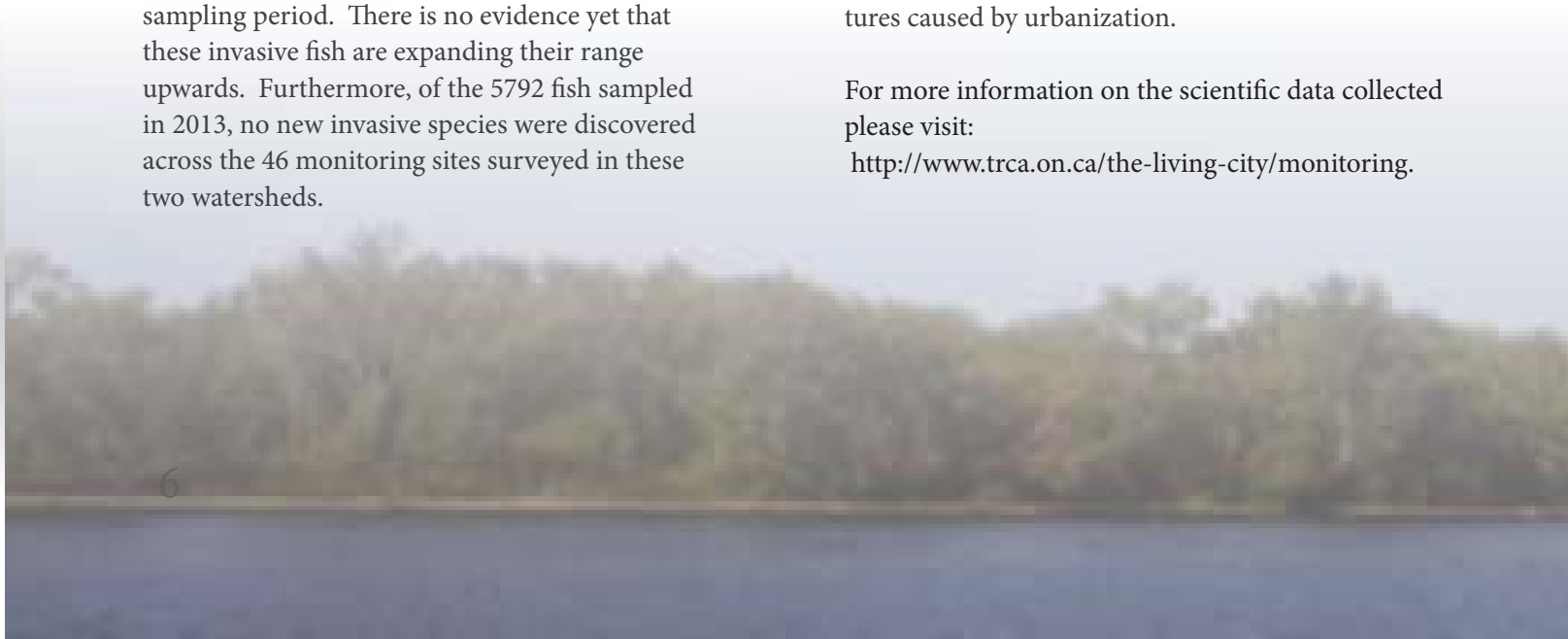
Benthic Macroinvertebrates

TRCA is now a provincial leader in identifying benthic macroinvertebrates ('aquatic bugs'), with the Ontario Benthos Biomonitoring Network (OBBN) sampling method adopted in 2013. It is expected that this new-found knowledge will increase the ability of the RWMP to detect and track changes in aquatic life across the 150 regional monitoring sites surveyed annually. Monitoring biological species can prove more effective in explaining changes in stream health over time compared to chemical evaluations.

Water Temperature

A summarized dataset spanning 12 years of monitoring water temperature at 150 sites is now available, with analysis of the data and trends currently underway. Additionally a number of year-round temperature loggers were installed at several locations in all nine watersheds and Frenchman's Bay in 2013. Water temperature data helps to explain population changes in aquatic species like the Brook Trout, whose numbers continue to decline across TRCA watersheds due to rising water temperatures caused by urbanization.

For more information on the scientific data collected please visit:
http://www.trca.on.ca/the-living-city/monitoring.



Waterfront monitoring and Projects

Waterfront Monitoring

The primary purpose of the Restoration and Environmental Monitoring (REM) Group's ecological monitoring is to inform restoration planning process by supporting the design and approval of many projects. Ecological monitoring helps prioritize what to restore amongst other worthy opportunities. The REM Group's monitoring programs also support regional research focused on the Toronto area waterfront and within TRCA's watersheds. Monitoring ensures adherence to the authorized or approved plan and is also an effective way to measure the success of recent restoration projects.

Fish Community Assessment

Fish community surveys within the study area help to determine composition, abundance and significant fisheries. These investigations also track any potential changes in the fisheries community. Understanding fish community characteristics is necessary in order to determine the success of restoration and protection measures. Collected fish community information is used as one component to evaluate the design features and structures within the construction project and provide insight and information about existing conditions. This in turn can be compared to historical data to provide a better understanding of trends and possible impacts of design. This information will feed into the continuous fisheries monitoring program for the pre, during and post construction of the restoration process.

In 2013 a total of 53,992 fish were noted as part of the monitoring for a variety of waterfront projects.

Beaches Monitoring

Eight of Toronto's eleven swimming beaches are designated as 'blue flag' beaches meaning that they meet an international standard for water quality, cleanliness and safety.

In addition to the daily water quality samples taken by the City of Toronto, monitoring and research is being conducted at the three beaches not designated as blue flag (due to poor water quality). Projects include: research to identify significant sources of sewage contamination; research on the predictive efficacy of new models for posting of beaches; and identification of the highest priority remedial actions to reduce sewage pollution.

Scarborough Waterfront Project

Toronto and Region Conservation Authority (TRCA) initiated a study under the Environmental Assessment Act to create a new waterfront park along the Lake Ontario shoreline from Bluffer's Park to East Point Park in Toronto, Ontario.

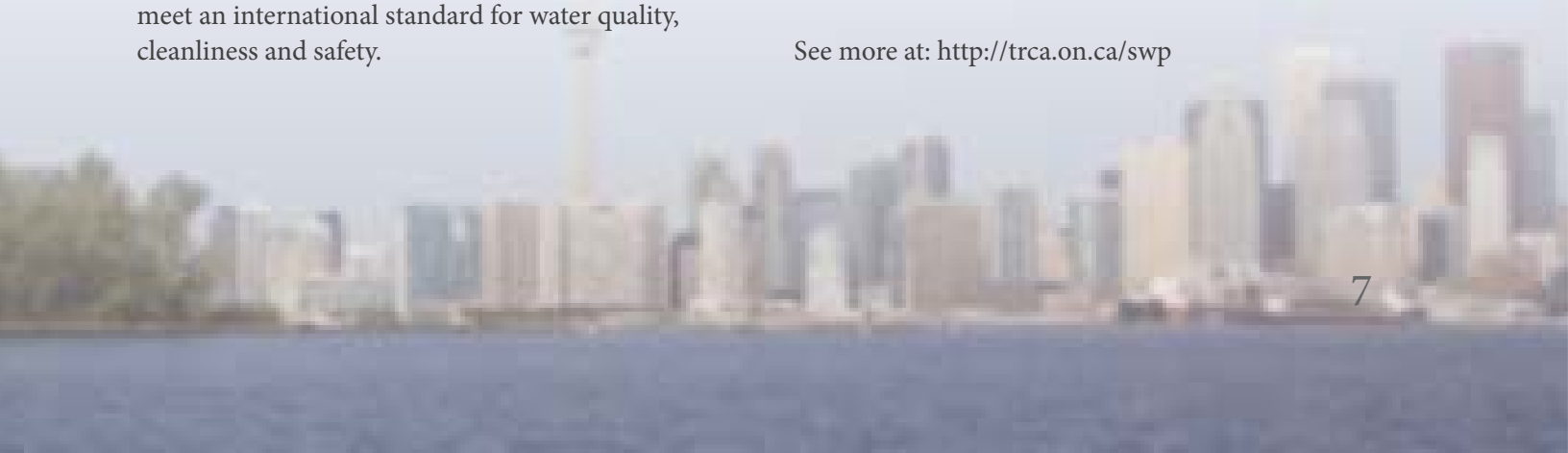
The purpose of the Scarborough Waterfront Project (SWP) is to create a system of linked scenic landscapes both along the top of the bluffs and at the water's edge that provide a waterfront experience with opportunities to actively enjoy the outdoors, to relax and reflect, and to learn about and appreciate the natural and cultural heritage.

The preliminary objectives of the proposed project are:

i) to integrate existing shoreline infrastructure with future slope stabilization works to reduce public risk and provide safe public access to and along the waterfront.

ii) to provide sweeping views and vistas of the bluffs and the lake; improve aquatic and terrestrial habitats to allow for a range of enhanced nature appreciation and fishing; improve trail connections to and along the waterfront; and provide passive recreational and cultural amenities.

See more at: http://trca.on.ca/swp



Fish and Wildlife

Aquatic Habitat Toronto

Aquatic Habitat Toronto (AHT) implements the Toronto Waterfront Aquatic Habitat Strategy (TWAHRS) to conserve, restore and create aquatic habitat that was destroyed or degraded over the past century and a half of urbanization. AHT consists of multiple agencies including the Toronto and Region Conservation Authority (TRCA), Fisheries and Oceans Canada (DFO), Environment Canada (EC), Ministry of Natural Resources and Forestry (MNR), the City of Toronto and Waterfront Toronto. AHT works collaboratively to integrate waterfront planning and expedite the regulatory process to streamline approvals and ensure all waterfront projects incorporate opportunities to improve aquatic habitat for fish and wildlife. AHT uses the expertise of its partner agencies to create and restore aquatic habitat and fisheries resources to create a more liveable and sustainable waterfront with the ultimate goal of delisting Toronto as an Area of Concern under the Great Lakes Water Quality Agreement and the Canada-Ontario Agreement. The work of AHT was featured this past year in the Plan Canada Journal (Fall 2013) in an article entitled, 'Toronto Waterfront Aquatic Habitat Restoration Strategy: A Unique and Collaborative Approach to Streamlining Approvals and Restoring Aquatic Habitat'.

In the early 20th century Ashbridges Bay Marsh was filled and the mouth of the Don River straightened to create what is now the Portlands. The loss of this large 428 ha coastal wetland in Toronto and the development of Toronto Harbour negatively impacted fish and wildlife populations and is one of the reasons Toronto is listed as an Area of Concern.

The Cell 2 Wetland project, which will restore 9.3 ha of coastal wetland to the Great Lakes, improving fish and wildlife habitat and opportunities for nature-based recreation is currently being undertaken. This unique aquatic habitat restoration project will cap and restore a former confined disposal facility used to dispose dredged sediment from the mouth of the Don River. Additionally AHT has been involved in the creation and restoration of over ten hectares of coastal wetlands in Toronto including Cell 1 wetland, Embayment D wetland, the Humber Marshes wetlands, and the Toronto Islands wetlands, which function as a Habitat Bank.

AHT is actively involved in the status assessment of fish habitat and populations as part of the Toronto and Region Remedial Action Plan (RAP) including a long-term acoustic telemetry project being undertaken by Carleton University to track seasonal habitat usage by several species of fish; the long-term electrofishing survey and assessment by the TRCA to examine the diversity and health of fish populations using a fish Index of Biotic Integrity (IBI) to compare to other areas of Lake Ontario; and the habitat mapping and fishery assessment by DFO and MNR using multiple gear types including bottom trawling and nearshore trap-netting.

AHT is also focused on raising awareness of improvements made to the fisheries resources on the Toronto waterfront by producing signs that have been placed at waterfront sites throughout Toronto to identify local fish species for the public and provide information on sportfish that can be safely eaten. AHT has also produced a Greater Toronto and Area Waterfront: Urban Recreational Fisheries Plan as a companion piece to TWAHRS.

Terrestrial Monitoring

Breeding bird monitoring in all habitat types (forest, wetland, and meadows) along with amphibian and red-backed salamander monitoring was been completed for the 2014 field season. Monitoring of forest vegetation (tree health, shrub and sapling regeneration, ground flora, and pests and diseases) has also been completed and the data collection of wetland vegetation is currently underway. Although the analysis of the 2014 data has not been initiated some interesting observations have been made. Meadow bird species populations such as bobolink and eastern meadowlark appear to continue to decline throughout the TRCA jurisdiction due to the lack of suitable habitat. Areas that start off suitable (large hayfields) are subsequently mowed too early in the season resulting in failed breeding attempts for these species. On a more positive note, high water levels have resulted in an increase of records for two wetland bird species, Pied-billed Grebe and Marsh Wren. Both species are of conservation concern in the TRCA jurisdiction due to their need for larger undisturbed wetland habitat. In addition, Barred owl, which has only been documented during the breeding season in a few rural areas of the TRCA jurisdiction, was detected on two occasions in an area close to residential development. It is not certain if this was an inexperienced bird or a species that is becoming adapted to urban encroachment.

Ontario BioBlitz

The Ontario BioBlitz is an annual event that includes an intense 24 hour biological inventory conducted at various locations across Ontario during the same (or similar) time frame. It is a collaboration between the Biodiversity Institute of Ontario, Royal Ontario Museum, Toronto Zoo, Ontario Nature, Rouge Park, Toronto and Region Conservation, Parks Canada and others. This year's main event BioBlitz was conducted on Saturday, May 24th and Sunday, May 25th in the Humber watershed with over 1500 species identified - the largest number in Ontario BioBlitz history!

Bioblitz Grouping Taxon	Number of Species Collected
Arachnids	109
Birds	121
Fish	27
Fungi and Slime Molds	45
Insects	500
Invertebrates (Non-Insect)	100
Herps	18
Lichens	94
Mammals	21
Mosses	78
Plants	450
OVERALL COUNT	1563...AND COUNTING!

Heart Lake Conservation Area (HLCA) Meadow Plots and Pollinator Habitat

Pollinator habitat has declined due to development and urbanization causing global threats to our pollinator species. There are over 1,000 species of pollinators in Canada and approximately 75% of flowering plants, including fruits and vegetables, require the efforts of pollinators. Toronto and Region Conservation Authority (TRCA) have been working to enhance and create pollinator habitat areas to provide necessary conditions for these species to thrive.

At HLCA, Etobicoke and Mimico Creek Watershed staff, community residents, local school groups and university partners have been working together to identify and enhance existing meadow areas, create new meadow plots and install habitat structures. Existing areas were identified and cleared of invasive vegetation which had crowded out native plants. The plots were then redefined using untreated cedar logs and paths were established to access the sites for regular maintenance. New plots were created using cedar logs to border the area, topsoil and brick sand was laid as a planting base and the sites were ready for community planting events.

Community and corporate groups, students and university partners attend these areas each spring, summer and fall to conduct regular maintenance by removing previous year's over-wintered growth, control weeds and invasive vegetation and plant native wildflowers. It is important to have a wide variety of native wildflowers which bloom in a variety of colours throughout the season. Did you know that many pollinators do not use odour as their guide to food sources but instead, use colour?

Most of us are familiar with bees that live in hives but there are many types of solitary bees. These solitary creatures use holes in trees or create tunnels in sand or loose soil for their homes. Along with providing native vegetation, staff and volunteers have installed habitat structures such as "Bee Condo's", pollinator "hotels" and bird structures. These habitat structures provide spaces for these creatures to lay eggs, shelter during storm events and raise fledglings. "Bee Condo's" are created using untreated 4" x 6" blocks of wood. Holes in a variety of diameter sizes are drilled into the face of the block to a depth of approximately 5". Another variety of "Bee Condo" installed at HLCA this spring includes recycled wine barrels packed with hundreds of pieces of bamboo of various diameters. The bamboo pieces was obtained through a unique partnership between the TRCA's Partners in Project Green program (PPG) and the Toronto Zoo. Through this partnership, PPG has helped the Toronto Zoo find opportunities to divert bamboo waste Giant Panda exhibit – bamboo is the primary food source for the Giant Pandas and the Pandas only consume various portions of the bamboo stalk and the left over bamboo becomes waste that is very difficult to compost due to its density. Solitary bees use these holes to lay their eggs, provide a food source and seal the entrance with mud, leaves or bits of sawdust until it is time for the larvae to emerge as the next generation.

These meadow plots and habitat structures have proven very successful with abundant sightings and activity of mining, wood nesting and leaf cutter bees, multiple butterflies and insects and several species of birds being observed throughout the season.

Heart Lake Road Ecology – Turtle Population Study

In 2011 it was brought to the attention of Toronto and Region Conservation Authority (TRCA) and City of Brampton (CoB) that multiple wildlife, vehicle collisions (WVCs) were occurring along Heart Lake Road. This area is home to a unique ecosystem and the location of a designated Provincially Significant Wetland which is bisected by Heart Lake Road. TRCA, CoB, Ontario Road Ecology Group (OREG) and local residents partnered together to conduct a road ecology study and suggest possible mitigation strategies.

This information is used to determine species of wildlife being affected, number of fatalities and locations of WVCs. "Hot spots" were identified and in August 2014, a turtle population study was conducted to identify populations of turtles in these fragmented wetlands. It was decided by partners to conduct this study with turtles for several reasons, one of which is seven of the eight native Ontario turtles are on the Species at Risk in Ontario List.

A group of dedicated volunteers with experience in wildlife and prior turtle handing was formed. TRCA staff attended the Kawartha Turtle Trauma Centre to confer with Dr. Sue Carstairs who has formed a charitable organization focused on the conservation of Ontario's native turtles. She guided staff on handling techniques, best practices to reduce stress during handling and provided valuable information to collect data. Dr. Tim Zaharchuk, veterinarian at a local clinic was on call to assist in the event medical attention was required for the animals.

Live traps were set around one of the sections of wetland and staff attended the traps using a Jon Boat, collected the turtles and carefully transported them to a staging area. Volunteers were on hand to collect data including: species identification, measurement of carapace and plastron, weight, scars or damage, determine sex if able (this difficult to do with juveniles), insert a PIT tag with a unique identification number, take blood samples to determine DNA and gather other pertinent information. Turtles were then placed in holding bins for a couple of hours to be monitored prior to being released back to the same location they were caught.

Volunteers sighted turtles basking and observed activity but unfortunately, this did not yield a high volume of captured and tagged species. There are several suggestions as to low numbers some of which may be weather conditions, air and water temperatures and abundance of food in the wetland. Despite low numbers, these efforts provided valuable data to continue with mitigation and future monitoring.

TRCA and partners will be continuing with this study and mitigation strategies are being put in place to protect this unique and diverse ecosystem, thus helping protect wildlife populations within the AOC.

If you would like to know more about this study, please see our report titled: Heart Lake Road Ecology Volunteer Monitoring Project (2013) (PDF 13.2 MB) at TRCA's, Etobicoke and Mimico Creek Watershed, Reports and Studies tab: http://www.trca.on.ca/the-living-city/watersheds/etobicoke-mimico-creek/resources.dot

Stewardship and education

Stewardship highlights

Almost 2500 residents were engaged in Stewardship programs throughout the region. Residential workshops were delivered across the GTA providing homeowners with an introduction to various low impact development technologies including the use of rain barrels, rain gardens, native plants and soakaway features, all of which help improve water quality in our local waterways.

Stewardship resources and guidebooks were distributed in print-ready and web ready versions including:
- Greening Your Grounds: A Homeowner's Guide to Stormwater Landscaping Projects
- Maintaining Your Pollinator Habitat: A Guide for Community Groups and Gardeners
- Invasive Species guide
- Native Plants for Your Garden (flip cards)
- 8 Stewardship factsheets covering the topics of Rainwater Harvesting, Rain Gardens, Bird Garden, Butterfly Gardens, Organic Lawn Care, Natural Neighbours, Naturescaping and Landscaping to Conserve Energy.

3,901 students participated in the Aquatic Plants program, students grew and planted 12,137 native aquatic and wet meadow plants. Additional information on this program can be found at: http://trca.on.ca/school-programs/program/29621

17,899 students were engaged through the Watershed On Wheels program, more information on which can be found at: http://trca.on.ca/school-programs/outreach-education/watershed-on-wheels/

Yellow Fish Road

During the 2013-2014 year 2090 people participated in the Yellow Fish Road program.

11,074 educational Yellow Fish Road flyers were distributed to residents, and 3,543 storm drains in the Greater Toronto Area were painted with yellow fish

More information on this program can be found at: http://www.yellowfishroad.org/

Multicultural Connections

The Mountain Equipment Co-op (MEC) funded Conservation Canoe Program was launched in July. Through this program 60 new Canadians, 72 high school students and 40 park visitors were introduced to the recreational sport of canoeing.

Funds through TD Friends of the Environment Foundation grant were leveraged and a Biodiversity and Pollinator Plants Program was developed and delivered to English as a Second Language schools and Language Instruction for Newcomers centres in the Highland Creek watershed during the spring of 2014. (This program will run again in the autumn of 2014)

In total 3,365 participants were engaged through the English as a Second Language and Language Instruction for Newcomers to Canada, as well as 2,023 participants through outdoor environmental events and field trips.

See the Salmon Run: Highland Creek

Community engagement and educational opportunities that involve the health of the salmon in Highland Creek have become an important part of annual outreach efforts. On Sunday, September 29th, 2013; TRCA, in partnership with The City of Toronto, Park People, and The Highland Creek Green Team, hosted the See the Salmon Run event in Morningside Park in Scarborough. Over 300 community members came out to learn about salmon migration, and the close connection that these fish share with the overall health of the creek. Accompanied and covered by over a dozen media outlets, the event included guided tours by experts in ecology, stormwater management, low impact development, as well as other key disciplines. Participants were invited to interact with a variety of educational displays, and were engaged in opportunities that they could get involved with to improve the health of the river in their communities.

16th Annual Richmond Hill Mill Pond Splash

In the northern section of the Don watershed; TRCA, in partnership with York Region, the Town of Richmond Hill, and Evergreen, hosted the 16th Annual Richmond Hill Mill Pond Splash in Mill Pond Park. This event is a unique eco festival that offers hands-on educational activities that motivate and encourage the public to make positive environmental changes in their communities. Visitors gain an increased appreciation for the natural environment, the challenges facing the Don River watershed, and the solutions that they can implement in their everyday lives. With over 2500 people in attendance, Mill Pond Splash continues to be one of the most highly attended environmental engagement events in the Toronto Region. The event provides an important opportunity for community associations, environmental NGOs, and local companies to promote their environmental efforts and encourage the public to become involved in their efforts to improve the Don River watershed.