



January 29, 2018

Mayor Jeff Lehman
City of Barrie
P.O. Box 400
70 Collier Street
Barrie, ON L4M 4T5

Dear Mayor Lehman and Members of Council,

Re: 2017 LSRCA Annual Report

On behalf of the Lake Simcoe Region Conservation Authority (LSRCA), I'm pleased to formally provide you with a copy of our 2017 Annual Report.

This year's report showcases an impressive list of accomplishments in our efforts to protect and restore the Lake Simcoe watershed. It's evident that our success is built on the strong relationships we share with our municipal, government and community partners. My sincere thanks to you and your staff for your support.

Our 2017 Annual Report has been shared with your staff through separate correspondence and is also available online by visiting our website in the 'About Us' section.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Walters".

Michael Walters
Chief Administrative Officer/Secretary Treasurer



Lake Simcoe Region
conservation authority

ANNUAL REPORT 2017

NATURE KNOWS BEST



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MESSAGE FROM OUR CAO

Behind the achievements outlined in this report stands an immense amount of dedication and hard work by our staff, our board members and our many partners.



2017 marked the Lake Simcoe Region Conservation Authority's sixty-sixth year as the Lake Simcoe watershed's most enduring and successful multi-jurisdictional environmental collaborative—a fact we're incredibly proud of and an accomplishment all on its own.

Fundamentally, we are waging a campaign for the protection and restoration of the environmental health and quality of Lake Simcoe and its watershed—to save it from further damage as a result of our human activities. It's a quest of considerable magnitude and one that we work hard to fulfill; 2017 was no exception. Behind the achievements outlined in this report stands an immense amount of dedication and hard work by our staff, our board members and our many partners.

What became abundantly clear in 2017, amid the mounting frequency of global natural disasters, is that lack of preparedness and resiliency to climate change is one of the greatest problems we face. Recognizing

that we're not immune to the same extreme weather threats in the Lake Simcoe watershed, we've been steadily adjusting course so that we can lead mitigation and adaptation strategies across the watershed.

Among the strategies we implemented in 2017 was one that LSRCA has been fervently developing and championing for a number of years—a policy and program to eliminate sources of phosphorus associated with new development—and on September 22, 2017 the Board of Directors made history by approving the Lake Simcoe Phosphorus Offset Policy. Developed in partnership with First Nations, the Ministry of Environment and Climate Change, member municipalities, the Building Industry and Land Development Association, and others, this innovative, first-of-its-kind policy, prescribes zero-phosphorus released from new development. Working in tandem, the phosphorus offset program will address residual phosphorus, if a development can't achieve the zero-target, by identifying and facilitating

environmental projects to ensure an offset ratio of 2.5 to 1 is achieved. The result will be a net reduction in phosphorus entering Lake Simcoe despite continued urban growth.

This program will make a significant shift in how new communities in our watershed are designed and constructed; “permeably paving” the way to far more resilient and environmentally sustainable development through implementation in 2018 and beyond.

A handwritten signature in dark ink, appearing to read "Michael Walters".

MIKE WALTERS

CHIEF ADMINISTRATIVE OFFICER

MESSAGE FROM OUR CHAIR

On the pages that follow, we boast
of a myriad of achievements.



We take pride in these accomplishments, but we would be remiss in taking credit for the work without recognizing the significant contribution and efforts of our partners—for we are stronger together.

Cultivating our bond with our First Nations partners has been and will continue to be a priority. With better awareness and understanding, we recognize and acknowledge the First Nations historic connection and unwavering care and respect for this land and water. With gratitude, we will continue to pursue a relationship that supports mutual learning and collaborative solutions to build climate change resiliency and a watershed that inspires and sustains us for infinite generations.

Our relationship with the Chippewas of Georgina Island is beginning to flourish, in part, through collaborative partnerships. In 2017, we saw the development of a subwatershed plan for Georgina Island and the completion of the Gerties Creek Restoration Project. These significant accomplishments were highlighted by the introduction of an education

program at Waabgon Gamig First Nation School that teaches students about aquatic life while monitoring the health of the newly restored creek. Among twenty other recipients, both the Chippewas of Georgina Island, along with the students of Waabgon Gamig First Nation School, were honoured with Healthy Water awards for their incredible work on restoring the health and function of Gerties Creek—a historic community site.

A few other highlights for me include our work to bring together municipalities, private sector and non-governmental organizations to raise awareness about the negative impacts of winter salt on our environment. Knowledge is power and LSRCA is leading to action with research, the sharing of information, and the development of best practices that will support the changes necessary to drastically reduce the amount of salt entering our lake from our roads and parking lots.

Together with teachers, our LSRCA educators have made a considerable impact on our lasting environmental legacy. In 2017, they exponentially

increased the number of students empowered and inspired to be our future environmental leaders. And back at home base, LSRCA departments came together to complete numerous restoration projects in our community, including multiple municipal low impact development demonstration projects.

Just as nature is connected, so are all of us. Together, with our communities, volunteers and LSRCA staff we are working towards a greater Lake Simcoe.

I'm extremely grateful to be chairing such an incredible organization and look forward to the many accomplishments we will set in motion in 2018 and beyond.

**AURORA MAYOR
GEOFFREY DAWE**

CHAIR, BOARD OF DIRECTORS

EASE UP ON THE SALT

Whereas the environmental impacts of phosphorus are fairly well understood by watershed residents, the same cannot be said about the environmental impacts of road salt.

We identified winter salt as an emerging issue a number of years ago and continue to put resources towards addressing the issue. If we aren't vigilant, salt has the opportunity to replace phosphorus as the greatest watershed issue.

SALT STRATEGY: CONVENORS OF ACTION

Through our research, we know that the largest contributor of winter salt is from the application to roads and commercial parking lots. Because we are not a road authority and have no direct ability to address the challenges associated with maintaining safe conditions in winter, our role has to be one of convening action... bringing together the parties that can have an influence on the issue and designing solutions to meet our goal of reducing chloride concentrations in watershed tributaries.

STARTING WITH DESIGN

We know that simple things like how a parking lot is designed can have an impact on how much salt needs to be applied in winter. We addressed this by developing guidelines for the design of new parking lots. These guidelines focus on four primary design features: how the area is graded and where stormwater is collected; where the snow gets stored on site; pedestrian flow and sidewalk design; and landscaping. The information from these guidelines was also featured in *The Journal of Green Building*, a quarterly publication that highlights the best of peer-reviewed research in green building design and construction. Three of our staff co-authored the article, which reaches more than 50,000 practitioners globally from a range of disciplines such as architecture, engineering, construction, facility management, urban planning, interior design and more.

REDUCING SALT REQUIRES COLLABORATION

One thing we know is certain—we can't solve the problem on our own. Our expertise is really around understanding the environmental impacts of applying too much winter salt. In order to impact how this gets translated on the ground, we rely on the support of others. So we're partnering.

In 2017, we co-hosted a bi-national forum in Toronto, with partners including the World Wildlife Fund and the US Consulate. One of its outcomes was the creation of a "Salt Working Group". Its goal is to develop a long term strategy that brings together experts from a variety of fields such as the public sector, the private sector, non-governmental organizations, legal experts and regulators.

We also have a seat at the board of the Smart About Salt Council, as well as on the Ontario Good Road Association's "Salt Vulnerable Areas Working Group" and Environment Canada's "Road Salt Working Group". We believe having a voice in these groups is essential to moving the issue forward.

HOSTED

27

COMMUNITY
EVENTS,
WITH OVER

1,600

ATTENDEES
PARTICIPATING
AT THOSE EVENTS



SPOTLIGHT ON COLLABORATION

Last year, we reported on the completion of our Stewardship Priorities and Opportunities Tool (SPOT), an online database of restoration projects. It represents three years of staff time spent literally walking hundreds of kilometres of streams and rivers.

We identified thousands of locations in need of repair, including areas where streambanks had eroded, infrastructure was damaged or areas where fish passage was blocked.

Taking action on this mountain of data was our next task—a task that began last year and required the collaborative efforts of many LSRCA departments. Thankfully, our Geographic Information Systems specialists are experts at managing mounds of data. By transferring the locations into map format, we are able to isolate priority areas to begin our outreach efforts. Communications staff developed an outreach strategy and Stewardship staff implemented the outreach. We sent targeted letters to property owners in priority areas in the Town of Uxbridge and King Township as the first outreach attempt. Of the more than 562 letters mailed out with invitations to two workshops, more than 45 residents came out.

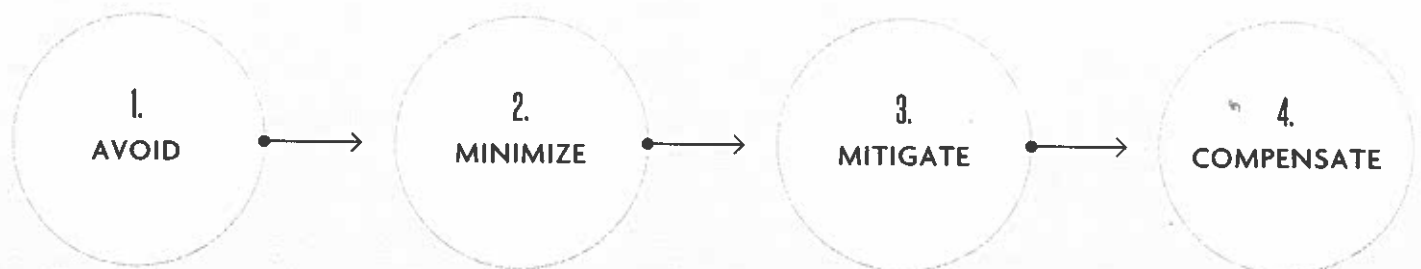
So far, we've completed 43 on-site visits to explore the range of restoration work we might be able to undertake and completed 23 restoration projects.

This kind of collaborative initiative is our mission in action—how we work together to protect and restore the Lake Simcoe watershed.



ECOLOGICAL OFFSETTING PLAN APPROVED

Our Ecological Offsetting Plan was approved by our Board of Directors in May 2017. Its goal is to minimize the environmental impacts associated with growth, by applying consistent standards across the watershed. These standards will make amends for the inevitable ecological losses that occur with growth. We consulted with a range of partners and have come up with a solution that is supported by the development industry. Our Offsetting strategy follows a principle of "no net loss". We achieve this by following a hierarchy of protocols—we prioritize avoidance as the first principle, followed by minimizing loss, mitigating and then we explore compensation as a last resort.



TAKING CARE OF TREES

Have you ever thought what life was like
for a tree? **WE HAVE.**

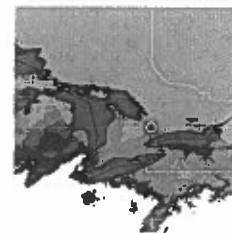
In fact we spend a lot of time thinking about the impact climate change has on them. This concern is the motivation behind a Climate Change Study we conducted on our forestry program.

Our work began with a literature review to confirm and expand our understanding of what is already known about the impacts of climate change on our trees. Knowledge transfer to partners in the watershed is a key objective of our work, so we hosted two workshops with forestry practitioners from the watershed and neighbouring regions to understand their concerns and experiences, and to develop recommendations for how to adapt planting and forest management programs.

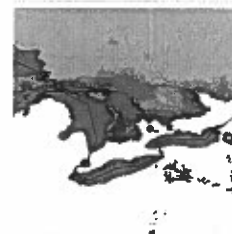
We learned and confirmed what we already suspected... higher temperatures, a longer growing season, variable precipitation patterns, extreme weather, invasive species—these are all having significant impacts on our forests now, and we can expect more change and challenges in the future. One of our key accomplishments is the creation of an updated tree species list that reflects what species are suitable for our changing climate, incorporating those changes into our forestry program, and sharing our knowledge with others.

DID YOU KNOW?

The White Spruce, a familiar tree species currently found in abundance throughout our watershed, is predicted to be pushed out of this area by 2050, because of climate change.



CURRENT
RANGE



RANGE
EXPECTED
IN 2020



RANGE
EXPECTED
IN 2050

● White Spruce Range

PUTTING SEDIMENT IN ITS PLACE

Although soil erosion is a naturally occurring process, the degree to which it occurs is largely influenced by what we do on the landscape.

When soil is disturbed and exposed to the elements, it has the potential to erode, creating a number of environmental issues. Soil carries with it contaminants and other nutrients such as phosphorus that run off into our streams and rivers.

Our Sediment and Erosion Control Program is about trying to keep soil where it already is and reducing the erosion associated with construction and development. We began work in this area in 2015 which resulted in the publication of a research study in 2016.

Last year we used the information we learned to develop guidelines that we've now shared with municipal and provincial staff, developers, contractors and engineering consultants. We also developed an evaluation tool to quantify erosion control practices and piloted the tool at 25 locations in two priority subwatersheds (Kempenhfelt Bay Creeks and Cook's Bay Creeks). We will share the results of this work in 2018.

SURVEY

SAYS!

OVER 50,000

**NATIVE TREES
AND SHRUBS
WERE PLANTED
BY LSRCA OR
COMMUNITY
GROUPS**

Getting feedback from the people who use our conservation areas is integral to ensuring we are meeting the needs of our visitors. We get their feedback through the use of surveys. This year we improved the process to deliver our survey entirely online and promoted it through a variety of tactics, including geofencing, a technique that uses a specific GPS location to deliver digital ads.

We received 700 conservation area survey responses from visitors at six different conservation area locations, and we did this while also dramatically reducing staff time needed to achieve these results. Each piece of feedback is read, considered, and informs our management decisions on our properties—places we hope to strengthen as spaces for refuge, inspiration, and joy for people and nature alike.

INVASIVE SPECIES

Our geographic location just north of Toronto means that we see large quantities of traffic passing through our watershed, particularly in summer. This human activity makes us highly susceptible to the spread of invasive species.

Through a partnership with the Ontario Federation of Anglers and Hunters, we were able to hire a summer student to survey and inventory invasive species in our watershed. In 2017, this student visited nine conservation areas to record 951 points where invasive species were found. They also engaged in some invasive species removal work in LSRCA conservation areas.

We know that invasive species represent a serious threat to our watershed. Without the funding to engage in proactive measures beyond this partnership, we rely on our community members and visitors to use best practices to help stop their spread. It is our hope that funding will be available to proactively take on this challenge in the years to come, since addressing invasive species problems reactively is more costly.

SHEPPARD'S BUSH

MANAGEMENT PLAN

We completed our management plan for Sheppard's Bush in 2017. This plan will be vital in guiding management decisions over the next five years. As part of the consultation process, we've learned that Sheppard's Bush continues to be one of our most visited properties, used by Go Train commuters and Aurora residents alike. These visitors head to Sheppard's to enjoy nature and scenery, or to take part in recreational activities like hiking or running.

Worthy of note is the fact that we've identified Japanese knotweed as an invasive species of particular concern, primarily because of its proximity to the historic Sheppard House. This plant has been known to break through concrete building foundations and cause extensive damage.

In order to help defray the costs associated with management of the conservation area, plans are underway to implement a parking fee in 2018.

TRAIL UPGRADES

SCANLON CREEK CONSERVATION AREA

We completed close to 500 metres of new trail that cuts through the middle of the former reservoir, bringing trail users down to the new wetland feature and the re-connected Scanlon Creek. The boardwalk and viewing platform portion of the project began in fall 2017, with completion planned by spring 2018.

We also completed upgrades to the Evergreen Trail. The project included re-routing approximately 100 metres of trail around sensitive slope. A small footbridge and steps were also installed.

BEAVER RIVER WETLAND TRAIL

The final 1.35 kilometres of trail between Blackwater and Sunderland has been graded and re-surfaced. A new head of trail kiosk with historical information, maps and facts about wetlands has been installed at Blackwater and two trail map kiosks have been installed along the trail to help guide hikers along their way. Trail cameras and trail counters were also installed along the trail to collect data on usage and to monitor trail activity.

ROGERS RESERVOIR CONSERVATION AREA

More than one kilometre of trail was built between Holland River Blvd and Young Street/Mount Albert Sideroad. The new trail build includes a lookout, benches, parking lot and trail head.



DIVERTING WILDLIFE FROM ROADS

Last year we reported on our Wildlife Safe Passage Project, in which we had identified the most dangerous roads to wildlife and piloted the installation of five barriers to see if they diverted turtles and other small wildlife from roads to reduce road kill.

Our efforts proved successful, pointing to an 80 percent reduction in road mortality at the pilot test sites.

Our next step was to share the results of our work with municipal roads managers through education sessions. In 2016 and 2017, we held 6 sessions with 86 municipal staff attending. We are also now in the process of developing policies that encourage road managers to incorporate wildlife passages when building new road infrastructure.

HONOURING OUR **WATERSHED HEROES**

We handed out 20 awards to environmental guardians during our annual Conservation Awards event held in November.

Lorrie Mackness was presented the George R. Richardson Award of Honour posthumously. The impact of his efforts lives on through the countless lives he touched and the many initiatives he started. The Ernie Crossland Young Conservationist Award went to 10 year old Eva Crothers for her work in setting up an Eco Club at her school in Uxbridge.



GEORGINA ISLAND **SUBWATERSHED PLAN**

The last of the subwatershed plans to be completed, Georgina Island's Subwatershed Plan, came at the request of the Chippewas of Georgina Island as part of Phase 3 of their own Climate Change Adaptation Strategy. The Plan contains 25 high priority recommendations that will be led by the Chippewas of Georgina Island.

PLANTING ON **GEORGINA ISLAND** AND BEYOND

A few years ago we received an invitation from Georgina Island First Nation to participate in a collaboration they had with the Ministry of Natural Resources and Forestry. Their collaboration involved trout rearing and release with the students at Waabgon Gamig school, and we were invited to add an aquatic planting component.

This collaboration has grown beyond Georgina Island. This year, we attended 17 classes from 8 different schools across the watershed, helping 330 students plant nearly 1,000 aquatic and terrestrial plants. Involving children directly in the raising of plants from seed helps them build a personal connection with nature. It's a relationship we hope they will continue to grow and take with them throughout their life.



ADDRESSING PHOSPHORUS

IN LAKE SIMCOE

Phosphorus concentrations have been and continue to be the single most important environmental issue for Lake Simcoe.

Phosphorus increases weed growth which limits oxygen levels and has a negative impact on our cold water fishery. Our goal of working towards achieving the 44 tonne annual phosphorus target in the Lake Simcoe Protection Plan is hampered by the fact that our watershed is continually growing.

We have undertaken a number of measures to reduce phosphorus entering Lake Simcoe over the years. Most recently, we've turned our attention to addressing increased phosphorus loads from urban development. We've been advocating for Low Impact Development techniques over the past few years and can now boast more than 12 Low Impact Development demonstration sites completed throughout the watershed. These sites provide real examples that we can share with others interested in lowering phosphorus levels in Lake Simcoe. Demonstration sites exist in Aurora, Barrie, Bradford, East Gwillimbury, Newmarket, Innisfil, Whitchurch Stouffville and Uxbridge.

SEEING IS BELIEVING

In September, we hosted a group tour for municipal staff and elected officials, along with other key partners to showcase some of these Low Impact Development sites. Attendees were given the chance to see the various Low Impact Development features at work and ask questions about implementing them in their own projects.

ALL ABOARD THE TREATMENT TRAIN

Through a collaboration with neighbouring conservation authorities, we've made it possible for developers, consultants, municipalities and others to calculate the phosphorus coming off their development projects. Known as the "Low Impact Development Treatment Train Tool", this online calculator provides the ability to estimate the phosphorus loads coming from development so that the effectiveness of adding Low Impact Development features can be determined and future loads compared.

NO NEW PHOSPHORUS

What can't be managed by Low Impact Development will be addressed through policy. Starting January 1, 2018, our Phosphorus Offset Policy requires new development to achieve zero phosphorus discharge. If zero discharge is not achievable on site, the phosphorus output has to be offset at a location within the same subwatershed, at a ratio of 2.5 to 1. That means, for every tonne of phosphorus that enters the environment, 2.5 tonnes will have to be removed elsewhere at the developer's cost.

HOSTED AND
DELIVERED

OUTDOOR EDUCATION PROGRAMMING

TO 3,193 STUDENTS
FROM OVER 49
DIFFERENT SCHOOLS
AND 159 CLASSES

600

KILOGRAMS
OF
PHOSPHORUS
REDUCED



IN THE COMMUNITY

We regularly work with partners throughout the watershed to deliver community programming designed to educate, engage, raise awareness and build relationships.

From tree plantings, to workshops, to day-long activities involving a number of like-minded collaborators, we reached thousands of watershed residents. Below are a few examples.

MOUNT ALBERT LIONS NATURE DAY

More than 100 participants enjoyed learning about nature and exploring the aquatic life in Vivian Creek. We planted native shrubs, which create homes for wildlife and habitat for pollinators, and explored nature through hikes and interactive games.

THE BROOK NEVER SLEEPS

Interactive eco-learning at its best—we're proud partners in this award-winning March Break initiative that's been running for seven years in the Township of Uxbridge. Its focus is on giving kids unique opportunities for hands-on creek science, right here in the watershed, on the Uxbridge Brook.



WE ENGAGED

3,985

STUDENTS IN OUR
OUTREACH PROGRAMS

OUR ANNUAL BIOBLITZ

More than 80 families came out to our third annual BioBlitz. A BioBlitz is an intense period of biological sampling to record all the living species within a designated area. This year's event was held at Sheppard's Bush Conservation Area in Aurora, where nature enthusiasts recorded more than 400 species, proving that urbanized areas like the Town of Aurora are still very much home to an impressive array of plants and animals. Work is already underway for our 2018 event which will be held at Rogers Reservoir Conservation Area in East Gwillimbury.



EDUCATION AT OUR NATURE CENTRE AT SCANLON CREEK

Education is about learning, growth, development, change.

We're not content with doing things the same and are always exploring new adventures and new ways to engage our communities.

New outdoor education programs launched this year include:

- Treasure Hunt
- Photo Orienteering
- Team Building
- Beat of the Forest
- Winter Walkers

The Nature Centre itself has undergone a refresh: new paint, signage and support materials in the lobby, classroom artwork, a water bottle refilling station and vinyl window coverings.

LET THE ADVENTURE BEGIN!

We've taken PA days to a whole new level with our new PA Day Adventure Camp for kids from 6–12 years. Our educators connect them with nature through a variety of fun outdoor activities like shelter building, treasure hunts and Olympic themed games.

EMBRACING INQUIRY BASED LEARNING

We know we enhance learning by encouraging curiosity. So we were more than happy to oblige when a local school board asked about collaborating in programming that pushed the boundaries of traditional classroom education. "Inquiry based learning" is a form of active learning that starts by posing questions, problems or scenarios, rather than simply presenting established facts. In this model, as educators, we take on a role closer to that of a facilitator in the path to knowledge. This type of instruction aligns closely with how we run our outdoor education program and is a natural fit for collaboration. Along with York Region District School Board and a partner conservation authority, we piloted the program in spring 2017, which then continued into the fall with 365 students at our Outdoor Education Centre and 462 outreach students. We also supported it by delivering several teacher professional development days at Scanlon.



TAKING OUR SHOW ON THE ROAD IN STYLE

Thanks to the generous support of the Conservation Foundation, our outreach team now has brand new wheels in which to travel to the various schools and community venues we visit across the watershed.

THERAPY IN THE WOODS

In an effort to expand the demographic and geographic reach of our Education program, LSRCA educators partnered with Children's Development Services at Royal Victoria Regional Health Centre (RVH) to offer a special outdoor education program for early learners with special needs.

Offered once per week for five weeks, the children, their caregivers and both LSRCA and RVH staff engaged in outdoor activities designed to improve their balance, sensory abilities, upper limb function and socialization skills. For a few hours each week, these children and their caregivers experienced the freedom to pursue new outdoor adventures in a safe and accepting environment.

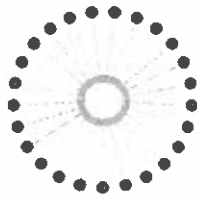


WE CAN'T BE EVERYWHERE... OR CAN WE?

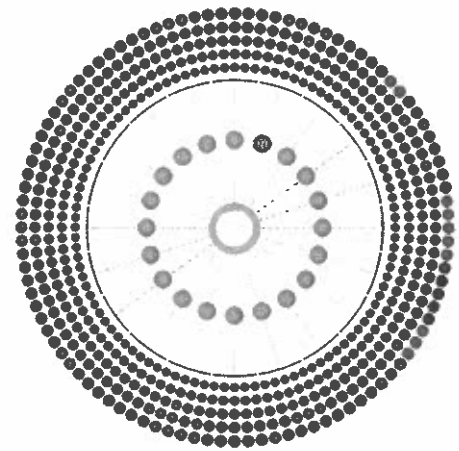
Our outdoor educators are experts in bringing the classroom to the outdoors. They carry a unique set of skills that complement those of elementary and high school teachers. Because teaching children in an outdoor environment is a skill in and of itself, we are often sought out to offer this expertise to both elementary and high school teachers. Over the years, our focus on teaching children in an outdoor setting has expanded so that we now also share skills and resources with teachers themselves, so they can take their students outside for learning opportunities. We may not be able to reach every child, but we don't have to. By sharing our outdoor education skills with other teachers, we have the potential to expand our reach exponentially.

In 2017, we offered 11 different teacher education sessions, reaching 201 teachers.

ONE OUTDOOR
EDUCATOR
TEACHES
25 CHILDREN



ONE OUTDOOR EDUCATOR
TEACHES 20 TEACHERS
WHO EACH TEACH 25 CHILDREN



○ Outdoor Educator

● Teacher

● Children

LEARNING AT ANY AGE

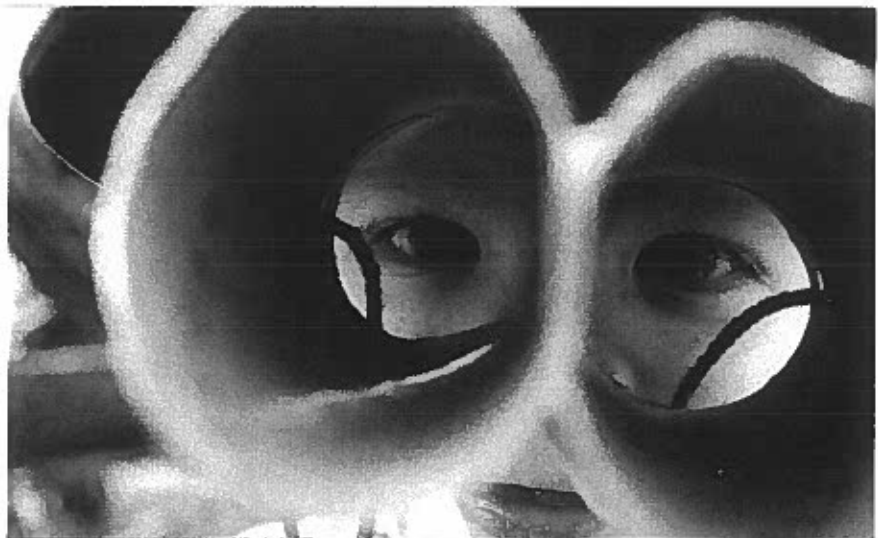
In follow up to a pilot senior's interpretive walk conducted in 2016, we offered two more similar sessions in 2017, in collaboration with one of our municipalities and a local seniors organization.

BORROW A BACKPACK ADVENTURE

We've collaborated with a number of partners to bring nature to library patrons. Two York Region libraries now offer Nature Backpacks on loan. Borrowed in the same way one takes out a book, the backpacks are filled with the essentials for family outdoor adventures. Each backpack focuses on a theme and contains items such as a compass, magnifying glass, trail guides and activity sheets.

SUMMER CAMPS

Our outdoor education program is busy year round, but when summer comes they go into high gear. In 2017, we engaged 813 campers through 3 different summer camp programs.



In my 15+ years in outdoor education, I have witnessed few programs as powerful and impactful as Therapy in the Woods. This collaboration has truly helped children and their families connect to the natural environment and work to achieve therapeutic goals at the same time. Words cannot describe how proud I am.

— RHEA TAPLIN,
Manager, Royal Victoria Regional Health Centre

GROWING OUR LANDS

As our built environment inevitably grows, the need to protect our natural spaces becomes even more important.

Nature is integral to our own well-being. It provides opportunities for recreation, and contributes to our physical and mental health. Nature also performs a variety of ecological functions.

For example, trees improve air quality and help mitigate the impacts of climate change. Wetlands provide flood protection. Grasslands, considered by Nature Conservancy Canada to be the world's most endangered ecosystem, provide important carbon storage. Not to be forgotten is the fact that all these natural areas provide critical habitat for our non-human watershed residents.

We currently own, manage or hold easements on 2,425 hectares (5,992 acres) of conservation land (an area almost the size of Orillia), representing an estimated \$20 million per year in ecological goods and services. Despite the fact that these lands carry such value, we continually experience challenges to secure the funds necessary to maintain them. Getting funding to increase our landholdings represents an even greater challenge.

But if anything, we are used to challenges; we see them as opportunities. Recognizing the challenges inherent in increasing our landholdings, we've stepped back to examine the current state. Through our Landholding Assessment, we've taken a close inventory of our current landholdings, what is required to maintain

them, where we'd like to see growth, identified opportunities for ecological restoration and calculated the costs of various scenarios.

Our Landholding Assessment describes 23 recommendations to maintain and grow our natural areas. Key amongst them is the need to develop a sustainable funding strategy and to shift our focus to moving towards a more sustainable approach to land management. These and other recommendations will be actioned in 2018 and beyond.

30

FLOOD BULLETINS ISSUED

SEEDLING SALE RECORD SET

2017 marks a record number of seedlings sold through our DIY (do-it-yourself) seedling sale.

This spring, we sold more than 14,500 tree and shrub seedlings to landowners to plant on their own properties, across York, Simcoe and Durham Region.



BALANCING TRANSPARENCY AND PRIVACY

Freedom of Information legislation dictates how we respond to requests for information from members of the public, and ensures we are transparent in our actions and decisions.

As we've reported in previous years, our staff have taken, and continue to take, a leadership role in ensuring we are transparent and responsive to requests from the public. They do so while also being keenly aware of the need to protect individuals' privacy.

This past year, our staff were recognized for their expertise in providing Freedom of Information training by being asked to deliver two webinars to help other conservation authorities implement best practices within their own organizations.

This year our staff were also invited to offer their expertise by delivering training sessions at two conferences for conservation authority and other staff: "Conservation Authority Collaborative Information Sessions", and "Ontario Connections".

DID YOU KNOW?

We received 26 Freedom of Information requests in 2017.

100 RESTORATION
PROJECTS
COMPLETED

SIGN OF THE TIMES

Last year's parking lot improvements at our head office location in Newmarket brought to light the need to upgrade the decades-old signage at our entrance. Our new head office sign is in keeping with the new landscaping and makes finding our location easier.

BEFORE



AFTER



SOURCE WATER UPDATE

We lead efforts to protect our drinking water sources for the South Georgian Bay Lake Simcoe Source Protection Region, a collaboration that also includes Nottawasaga Valley Conservation Authority and Severn Sound Environmental Association. Our efforts this year included a redesign of ourwatershed.ca website, which has evolved into a site to share resources with our municipal colleagues. Through a funding collaborative of more than 12 municipalities, we also oversaw the development of new outreach materials, including fact sheets, infographics, videos and photography.

STAFF SPOTLIGHT

SHAUNA FERNANDES CHAGANI



JOB TITLE:

Natural Heritage Ecologist

WHAT I REALLY DO: Protect the natural heritage features of our watershed through plan review and the creation of LSRCA strategies.

PARTICULARLY PASSIONATE ABOUT: Learning... and being open to trying new things!

WHAT I LOVE MOST ABOUT MY JOB: Working with people who share the same values of protecting and enjoying our natural world.

ACCOMPLISHMENT I AM PARTICULARLY PROUD OF: Starting my Master's this year and trekking the Inca Trail in Peru last year.

RANDOM FACT: I'm a tap dancer and perform in regional theater shows.

WHAT MAKES ME HAPPIEST: Travelling; I have a bucket list of 60 countries and am almost halfway there.

BROOK PIOTROWSKI



JOB TITLE:

Urban Restoration Construction Specialist

WHAT I REALLY DO: I manage all stages in the identification, development and implementation of LSRCA environmental construction projects, focusing on urban stormwater management and stream erosion protection and naturalization.

PARTICULARLY PASSIONATE ABOUT: Besides the environment? I'm a car guy. I enjoy working on them in my garage.

WHAT I LOVE MOST ABOUT MY JOB:

Every project is unique. It is very rewarding to be involved in a project from the beginning concept design stages, all the way through to participating in a planting event after the heavy construction equipment has left the site.

ACCOMPLISHMENT I'M PARTICULARLY PROUD OF: Being part of the team that removed the Scanlon Creek Dam and restored over 500 metres of Scanlon Creek back to its original condition.

RANDOM FACT: I have resided in Lake Simcoe's watershed for over 40 years.

WHAT MAKES ME HAPPIEST: Going for a hike with the family and being anchored out on Lake Simcoe, watching the sun set.

STAFF SPOTLIGHT

MICHELLE BATES



JOB TITLE:

Environmental Regulations Analyst

WHAT I REALLY DO: Review permit applications for development in areas regulated under Ontario Regulation 179/06.

PARTICULARLY PASSIONATE ABOUT: Living an active and healthy lifestyle.

WHAT I LOVE MOST ABOUT MY JOB: Collaborating with technical staff, problem solving, and knowing that development has regard for natural hazards and features.

ACCOMPLISHMENT I AM PARTICULARLY PROUD OF: Volunteering in Australia for conservation initiatives.

RANDOM FACT: I've lived in the Lake Simcoe watershed for almost 20 years!

WHAT MAKES ME HAPPIEST: Going on hikes with my dog, Boots.

MARY QUATTROMINI



JOB TITLE:

Accounting Clerk

WHAT I REALLY DO: Have fun! I look after accounts payable and receivable. I prepare our weekly cheque runs, ensure all invoices/expenses/purchase orders are processed and I make sure that staff adhere to our purchasing policies and procedures.

PARTICULARLY PASSIONATE ABOUT: My daughter, my husband and my family.

WHAT I LOVE MOST ABOUT MY JOB: Interacting with the people I work with.

In fact, I also volunteer on two Committees at work—our Wellness Committee and our Social Committee.

ACCOMPLISHMENT I AM PARTICULARLY PROUD OF: Climbing Mon Viso mountain in the Cottian Alps last year.

RANDOM FACT: I worked as a make-up artist for 20 years.

WHAT MAKES ME HAPPIEST: I love spending time with my closest friends (they are so funny) and family; travelling; gardening and... shopping of course!

2,000

METRES OF
STREAMBANK
RESTORED

STAFF ACHIEVEMENTS

NICOLE HAMLEY AND DANA ELDON along with staff from Simcoe County District School Board and Simcoe Muskoka District Health Unit, presented at the "Healthy School Communities National Forum" in Ottawa. Their presentation was to showcase our schoolyard naturalization collaborative project in Simcoe County. The program's goal is to increase opportunities for student engagement through schoolyard naturalization projects.

KAITLYN READ attended the second bilingual Conference on Road Ecology and Climate Change Adaptation in October in Quebec City. Her poster presentation reported on the results of our own three-year Wildlife Safe Passage project to 215 delegates from around the world. She also had the opportunity to tour wildlife passages installed along route 175 in Jacques-Cartier National Park in Quebec.

DR. BRIAN GINN'S 2016 paper was nominated for the "2017 James LaBounty Best Paper of the Year" by the North American Lake Management Society. Brian Ginn co-authored the paper with Dr. Melissa Moos (a former post-doctoral fellow at LSRCA working on this project), entitled "Developing a lake management strategy by dovetailing lake monitoring with paleolimnological techniques: a case study from a kettle lake on the Oak Ridges Moraine" that appeared in the journal "Lake and Reservoir Management". This is the second time in three years that one of our researcher's papers has been nominated for this award.

THREE OF OUR STAFF co-authored an article that appeared in the peer-reviewed Journal of Green Building (Spring 2017). David Lembcke, Bill Thompson, Kaitlyn Read and two others authored "Reducing Road Salt Application by Considering Winter Maintenance Needs in Parking Lot Design". Based on research undertaken at LSRCA, the authors discussed how winter salt use in parking lots can be reduced undertaking simple design features. The article also provided a series of best management practices to follow.

DANA ELDON, our outdoor educator "extraordinaire", was given a Watershed Interpreters Network Award this year, an honour that recognizes her outstanding leadership in watershed education across the province. The combination of Dana's warm personality, positive outlook, watershed knowledge and ability to engage and build community partnerships is unrivalled. With staff like Dana on board, it's no wonder we were able to reach nearly 4,000 students and 100 teachers this year.

BRIAN KEMP AND ROB BALDWIN attended the 20th Annual International RiverSymposium and Environmental Flows Conference in Brisbane, Australia. It was a wonderful opportunity as a past winner of the Thiess International Riverprize for LSRCA leaders to return to Brisbane to provide presentations on the success of our Twinning Program with the Ayuquila-Armeria Watershed in Mexico and the importance of creating a public-private relationship to achieve maximum benefits in the Lake Simcoe watershed.

KATE LILLIE achieved her Ontario Wetland Evaluation System (OWES) designation, demonstrating strong expertise in wetland ecology. Kate joins a number of other LSRCA staff as being qualified to evaluate areas in our watershed for their status as a wetland. Having staff with recognized skills and expertise demonstrates our commitment to wetland understanding and protection.

SHAUNA FERNANDES CHAGANI received her Certificate in Sustainable Landscapes from the University of Guelph, a program that took three years to complete. The certification reflects Shauna's proficiency in working with consultants to review and design development proposals that emphasize sustainability in landscape design.

EAVAN O'CONNOR received her designation as a Chartered Chemist (C.Chem). This newly acquired licensing designation demonstrates a high level of skill and knowledge in her work in water chemistry monitoring and therefore her expertise in safeguarding the watershed. Chartered Chemists must follow a strict code of ethics that includes placing public welfare above any consideration and ensuring that environmental and ecological concerns are taken into account in the performance of their duties.

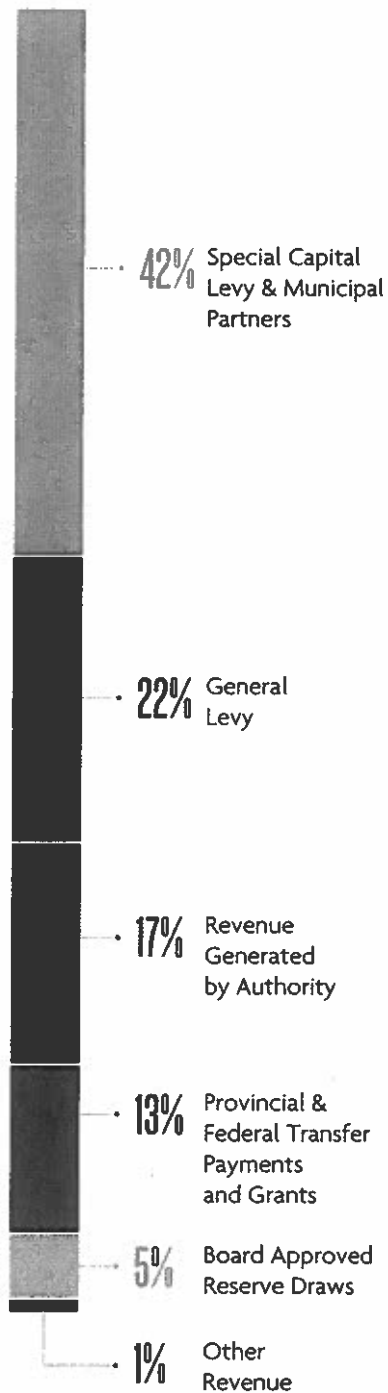


FINANCIAL

SUMMARY

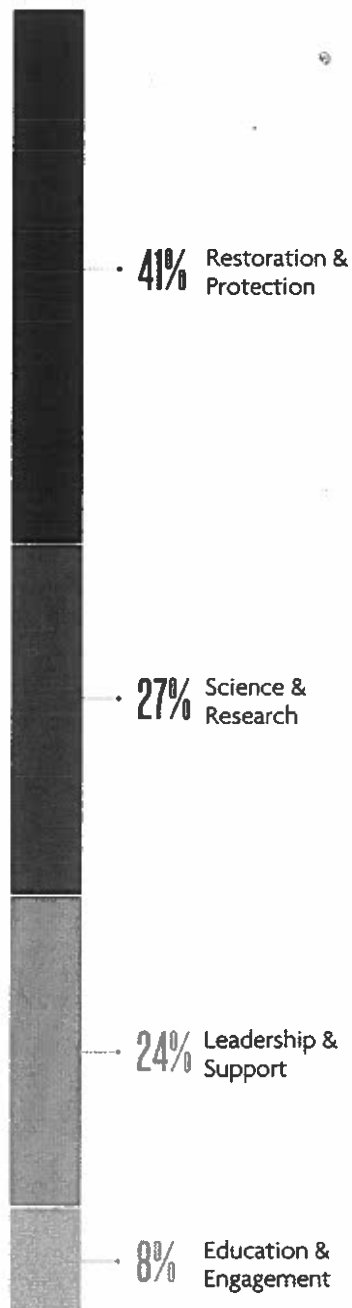
2017 REVENUES

\$16,396,753



2017 EXPENDITURES

\$16,396,753



6

REGULATIONS
CONVICTIONS
IN 2017



70

LIVESTOCK WERE
RESTRICTED FROM OUR
CREEKS AND RIVERS



2017 BOARD OF DIRECTORS

CHAIR

Mayor Geoffrey Dawe

YORK REGION

Town of Aurora

CITY OF BARRIE

Councillor Peter Silveira

CITY OF BARRIE

Citizen Representative

Mr. Jay Dolan

CITY OF KAWARTHA LAKES

Councillor Stephen Strangway

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DURHAM REGION

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TOWNSHIP OF ORO-MEDONTE

Councillor Scott Macpherson

VICE-CHAIR

Councillor Richard Simpson

TOWN OF INNISFIL

TOWNSHIP OF RAMARA

No representative appointed

YORK REGION (AT LARGE)

Town of Georgina Regional

Councillor & Deputy Mayor

Naomi Davison

YORK REGION

Town of East Gwillimbury

Mayor Virginia Hackson

YORK REGION

Town of Georgina

Mayor Margaret Quirk

YORK REGION

Township of King

Councillor Avia Eek

YORK REGION

Town of Newmarket

Councillor Dave Kerwin

YORK REGION

Town of Whitchurch-Stouffville

Councillor Ken Ferdinands

Lake Simcoe Region Conservation Authority

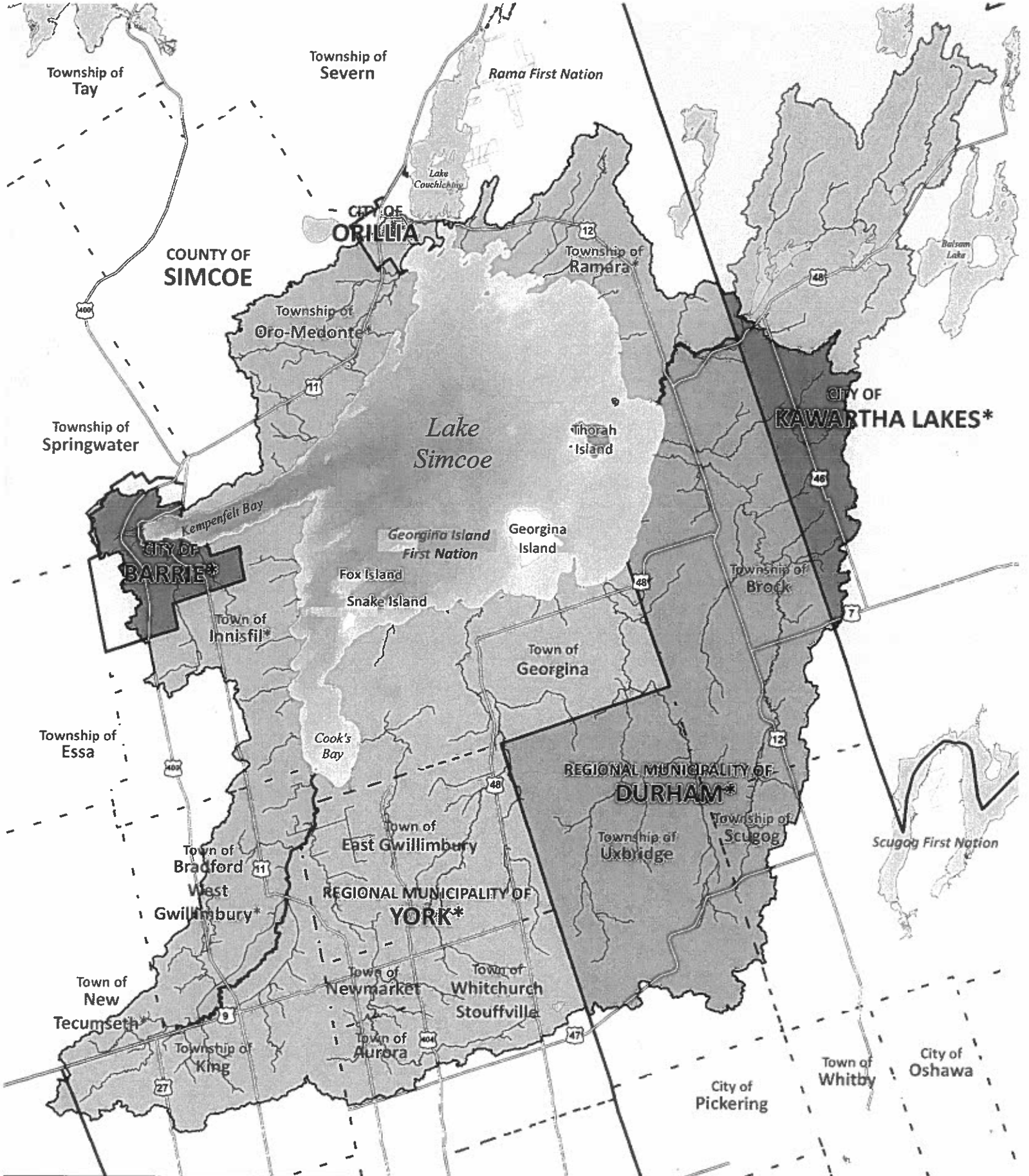
LSRCA is a local watershed management organization incorporated under the Conservation Authorities Act (1946).

Since 1951, we have been dedicated to protecting, restoring and managing the Lake Simcoe watershed.








Over our 65 years of service, our jurisdiction has grown to include the entire Lake Simcoe watershed with the exception of the City of Orillia and the Upper Talbot River subwatershed, in the City of Kawartha Lakes.

LSRCA is governed by an 18-member Board of Directors, appointed by nine member municipalities.





Legend

-  Lake Simcoe Watershed
-  LSRCA Jurisdiction
-  Watercourse
-  Major Road
-  Upper / Single Tier Municipality
-  Lower Tier Municipality
-  * Member Municipality, LSRCA

0 5 10 20 30 Kilometres

This product was produced by the Lake Simcoe Region Conservation Authority and some information depicted on this map may have been compiled from various sources. While every effort has been made to accurately depict the information, data / mapping errors may exist. This map has been produced for illustrative purposes only.
 LSRCA GIS Services DRAFT created December 2017.
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Lake Simcoe Region
conservation authority



Lake Simcoe Region Conservation Authority (LSRCA) is the leading environmental protection agency in the Lake Simcoe watershed. For over 65 years, we've been collaborating with community, government and other partners to protect and restore the environmental health and quality of Lake Simcoe and its watershed.

www.LSRCA.on.ca

E info@LSRCA.on.ca

T 905-895-1281

TF 1-800-465-0437

120 Bayview Parkway

Newmarket, Ontario L3Y 3W3

f [lakesimcoeconservation](https://www.facebook.com/lakesimcoeconservation)

ig [lakesimcoeconservation](https://www.instagram.com/lakesimcoeconservation)

tw @LSRCA

yt TheLSRCA



Lake Simcoe
Conservation
Foundation



Lake Simcoe Conservation Foundation (LSCF) is the leading environmental charity in our watershed, raising funds from individuals and organizations for the critical environmental programs and projects of Lake Simcoe Region Conservation Authority. LSCF is one of only a few environmental charities nation-wide that has been accredited in Imagine Canada's Standards Program after demonstrating excellence in operations in the charitable sector. Contact LSCF directly for information about how you can support their important fundraising activities.

lakesimcoefoundation.ca

E foundation@LSRCA.on.ca

T 905-895-1281

TF 1-800-465-0437

120 Bayview Parkway

Newmarket, Ontario L3Y 3W3

The work highlighted in this publication couldn't have been done without the generous support of our partners.

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